

NATIONAL STEEL CO  
Form 20-F  
April 05, 2019

**As filed with the Securities and Exchange Commission on April 4, 2019.**

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

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**FORM 20-F**

.. REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
OR  
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2018  
OR  
.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
OR  
.. SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

**Commission File Number 1-14732**

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**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)

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

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

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\* 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, 2018:

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  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  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.

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, a non-accelerated filer or an emerging growth company. See definition of "large accelerated filer," "accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Emerging growth company

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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 Board

Other

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 “MW” 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, 2018 and 2017 and for the years ended December 31, 2018, 2017 and 2016 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” and other 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, 2018 and 2017 and for the years ended December 31, 2018, 2017 and 2016 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\$3.875 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2018, 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.

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 summary financial and operating data derived from our audited consolidated financial statements as of and for the years ended December 31, 2018, 2017, 2016, 2015 and 2014.

We adopted IFRS 9 – *Financial Instruments* and IFRS 15 – *Revenue from contracts with customers* as of January 1, 2018. As permitted under IFRS, we did not apply IFRS 9 and IFRS 15 retroactively. As a result, financial information as of and for the year ended December 31, 2018 is not comparable with financial information for prior periods. For further information on our adoption of IFRS 9 and IFRS 15, see note 2.v. to our audited consolidated financial statements included elsewhere herein.

Financial information presented in this annual report should be read in conjunction with our audited consolidated financial statements included elsewhere herein.

### Summary Financial and Operating Data

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

Income Statement Data:	Year Ended December 31,					
	2018 <sup>(1)</sup> <i>(in millions of US\$, except per share data)</i>	2018	2017 <sup>(5)</sup>	2016 <sup>(5)</sup>	2015 <sup>(5)</sup>	2014 <sup>(5)</sup>
			<i>(in millions of R\$, except per share data)</i>			
<b>Net operating revenues</b>	<b>5,927</b>	<b>22,969</b>	<b>18,525</b>	<b>17,149</b>	<b>15,262</b>	<b>16,126</b>
Cost of products sold	(4,156)	(16,106)	(13,596)	(12,640)	(11,740)	(11,592)
<b>Gross profit</b>	<b>1,771</b>	<b>6,863</b>	<b>4,929</b>	<b>4,509</b>	<b>3,522</b>	<b>4,534</b>
<b>Operating expenses</b>						
Selling	(584)	(2,264)	(1,815)	(1,697)	(1,430)	(1,042)
General and administrative	(127)	(494)	(416)	(518)	(470)	(438)
Equity in results of affiliated companies	35	136	109	65	1,160	331
Other expenses	(343)	(1,331)	(647)	(1,077)	(1,341)	(657)
Other income <sup>(3)</sup>	1,042	4,036	824	663	3,610	90
<b>Total<sup>(4)</sup></b>	<b>21</b>	<b>83</b>	<b>(1,945)</b>	<b>(2,564)</b>	<b>1,529</b>	<b>(1,716)</b>
<b>Operating income</b>	<b>1,793</b>	<b>6,946</b>	<b>2,984</b>	<b>1,945</b>	<b>5,051</b>	<b>2,818</b>
<b>Non-operating income (expenses), net</b>						
Financial income	338	1,311	295	644	488	172
Financial expenses	(724)	(2,806)	(2,759)	(3,166)	(3,853)	(3,253)
<b>(Loss) income before taxes</b>	<b>1,407</b>	<b>5,451</b>	<b>520</b>	<b>(577)</b>	<b>1,686</b>	<b>(263)</b>
<b>Income tax</b>						
Current	(213)	(827)	(359)	(206)	(136)	(528)
Deferred	149	577	(50)	(60)	(2,768)	679
<b>Net income (loss) from continuing operations</b>	<b>1,342</b>	<b>5,201</b>	<b>111</b>	<b>(843)</b>	<b>(1,218)</b>	<b>(112)</b>
<b>Net income (loss) from discontinued operations<sup>(2)</sup></b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(10)</b>	<b>2</b>	<b>-</b>
<b>Net income (loss) for the period</b>	<b>1,342</b>	<b>5,201</b>	<b>111</b>	<b>(853)</b>	<b>(1,215)</b>	<b>(112)</b>
<b>Net income (loss) attributable to noncontrolling interest</b>	<b>33</b>	<b>126</b>	<b>101</b>	<b>82</b>	<b>(2)</b>	<b>(7)</b>

<b>Net income (loss) attributable to Companhia Siderúrgica Nacional</b>	<b>1,309</b>	<b>5,075</b>	<b>10</b>	<b>(935)</b>	<b>(1,213)</b>	<b>(105)</b>
Basic earnings per common share	0.95354	3.69498	0.00757	(0.68876)	(0.89461)	(0.07443)
Diluted earnings per common share	0.95354	3.69498	0.00757	(0.68876)	(0.89461)	(0.07443)

<b>Balance Sheet Data:</b>	<b>2018<sup>(1)</sup></b>	<b>2018</b>	<b>As of December 31,</b>			
	<i>(in millions of US\$, except per share data)</i>		<b>2017<sup>(5)</sup></b>	<b>2016<sup>(5)</sup></b>	<b>2015<sup>(5)</sup></b>	<b>2014<sup>(5)</sup></b>
			<i>(in millions of R\$, except per share data)</i>			
Current assets	3,100	12,014	11,881	12,445	16,431	15,936
Investments	1,453	5,631	5,499	4,568	3,998	13,665
Property, plant and equipment	4,657	18,047	17,965	18,136	17,826	15,624
Other assets	3,003	11,636	9,865	9,005	9,084	4,542
<b>Total assets</b>	<b>12,214</b>	<b>47,328</b>	<b>45,210</b>	<b>44,154</b>	<b>47,339</b>	<b>49,767</b>
Current liabilities	2,952	11,439	10,670	5,497	5,082	6,363
Non-current liabilities	6,678	25,876	26,252	31,272	35,166	37,669
Stockholders' equity	2,584	10,013	8,288	7,385	7,091	5,735
<b>Total liabilities and stockholders' equity</b>	<b>12,214</b>	<b>47,328</b>	<b>45,210</b>	<b>44,154</b>	<b>47,339</b>	<b>49,767</b>
Paid-in capital	1,172	4,540	4,540	4,540	4,540	4,540
Common shares (in millions of shares)	1,388	1,388	1,388	1,388	1,388	1,388
Dividends declared and interest on stockholders' equity <sup>(4)</sup>	232	898	-	-	275	700
Dividends declared and interest on stockholders' equity per common share (in reais) <sup>(4)</sup>	0.17	0.65	-	-	0.20	0.50

(1) Translated solely for the convenience of the reader at the rate of R\$3.875 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2018, 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.

(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."

(5) Due to the adoption of IFRS 9 and IFRS 15 as of January 1, 2018, which we did not apply retroactively, financial information as of and for the year ended December 31, 2018 is not comparable with financial information as of and for the years ended December 31, 2014, 2015, 2016 and 2017.

	Year Ended December 31,			
	2016	2017	2018	2018 <sup>(1)</sup>
<b>Reconciliation of Net Income (Loss) to EBITDA and Adjusted EBITDA</b>	(in millions of R\$)			(in millions of US\$)
Net income (loss)	(853.1)	111.2	5,200.6	1,342.1
Net income (loss) from discontinued operations <sup>(2)</sup>	9.6	-	-	-
Depreciation/amortization/depletion	1,278.8	1,408.8	1,175.1	303.3
Income tax and social contribution	266.5	409.1	250.3	64.6
Financial income (expenses)	2,522.4	2,463.6	1,495.6	386.0
<b>EBITDA<sup>(3)</sup></b>	<b>3,224.3</b>	<b>4,392.7</b>	<b>8,121.7</b>	<b>2,095.9</b>
Other operating income (expenses)	413.2	(177.3)	(2,705.3)	(698.2)
Equity in results of affiliated companies	(64.9)	(109.1)	(135.7)	(35.0)
Proportionate EBITDA of joint ventures	502.3	538.2	568.0	146.6
<b>Adjusted EBITDA<sup>(4)</sup></b>	<b>4,074.9</b>	<b>4,644.4</b>	<b>5,848.7</b>	<b>1,509.3</b>

(1) Translated solely for the convenience of the reader using the U.S. dollar selling rate as reported by the Central Bank of R\$3.875 to US\$1.00 as of December 31, 2018. See "Exchange Rates."

(2) The results of our former subsidiary 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 (loss) from discontinued operations" due to the sale of Metalic in November 2016.

(3) We calculate EBITDA as net income (loss) for the period *plus* net financial income (expenses), income tax and social contribution, depreciation and amortization and results from discontinued operations.

(4) We calculate adjusted EBITDA as net income (loss) for the period *plus* net financial income (expenses), income tax and social contribution, depreciation and amortization and results of discontinued operations, *plus* other operating income (expenses), equity in results of affiliated companies and the proportionate EBITDA of joint ventures. EBITDA and adjusted EBITDA are not measures of financial performance recognized under Brazilian GAAP or IFRS and they should not be considered alternatives to net income (loss) as measures of operating performance, or as alternatives to operating cash flows, or as measures of liquidity. EBITDA and adjusted EBITDA are not calculated using a standard methodology and may not be comparable to the definition of EBITDA or adjusted EBITDA, or similarly titled measures, used by other companies.

### 3B. Capitalization and Indebtedness

Not applicable.

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



Not applicable.

**3D. Risk Factors**

*An investment in the ADSs or our 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 the 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 the ADSs, except as otherwise indicated. The risks described below are those that we currently believe may materially and adversely affect us.*

### **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 changes in policy and regulations. The Brazilian government’s actions to control inflation and affect 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 1.1% in 2018, 1.0% in 2017 and contracted (3.5)% in 2016.

We have been, and will continue to be, affected by the weakness of the Brazilian GDP. We cannot assure 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.***

The Brazilian economy has been affected by political events in Brazil, which have also affected the confidence of investors and the public in general.

Brazilian markets have been experiencing heightened volatility due to uncertainties derived from the ongoing *Lava Jato* investigation and other investigations, which are conducted by the Brazilian Federal Police and the Federal Prosecutor's Office, and the impact of these investigations 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 related to bribes by means of kickbacks on contracts granted by the government to several infrastructure, oil and gas and construction companies, among others. Profits from these kickbacks allegedly 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, former President Luiz Inácio Lula da Silva and officers of the major state-owned and private companies in Brazil, resigned or have been arrested.

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. We cannot predict whether the investigations in course will result in heightened economic and political volatility in Brazil or whether new investigations against politicians or officers of private companies will occur in the future.

In addition, in October 2018, following a divisive presidential race, congressman Jair Bolsonaro became Brazil's president on January 1, 2019. It is unclear if and for how long the political divisions in Brazil that arose prior to the elections will continue under Mr. Bolsonaro's presidency and the effects that any such divisions will have on Mr. Bolsonaro's ability to govern Brazil and implement reforms. Any continuation of such divisions could result in congressional deadlock, political unrest and massive demonstrations or strikes that could materially adversely affect our operations. Uncertainties in relation to the new government's implementation of monetary, tax and pension fund policy changes may contribute to economic instability. These uncertainties and new measures may increase market volatility of securities issued by Brazilian companies.

The president of Brazil has the power to determine policies and issue governmental acts relating to the Brazilian economy that affect the operations and financial performance of companies in Brazil, including ours. We cannot predict which policies the newly elected president will adopt or if these policies or changes in current policies may have an adverse effect on the Brazilian economy or us.

***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 compared to the U.S. dollar and other foreign currencies. In 2017, the *real* appreciated against the U.S. dollar, reaching R\$3.29 per US\$1.00 as of December 31, 2017. In 2018, the *real* depreciated and was R\$3.84 per US\$1.00 as of December 31, 2018.

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 affect our growth and that of the Brazilian economy, 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 *reals* 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\$15,951 million, which represents 55% of our total indebtedness, as of December 31, 2018.

***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 6.3%, 3.0% and 3.8% in 2016, 2017 and 2018, respectively, and 7.2%, (0.5)% and 7.8%, respectively, 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, 2016, 2017 and 2018, the SELIC rate was 13.65%, 7.00% and 6.50%, respectively.

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 based on a variety of pricing terms, which generally use market price indices as a basis for determining customer prices. Our prices for and revenues from iron ore are consequently volatile, which may adversely affect us. In 2018, average iron ore prices decreased 2.6% to US\$69.5/dmt, from US\$71.3/dmt in 2017. In 2017, average iron ore prices increased 22.0% to US\$71.3/dmt, from US\$58.4/dmt in 2016, according to the average Platts IODEX (62% Fe CFR China). On April 1, 2019, the index was US\$89.65/dmt. A decrease in market prices for iron ore may require us to change the way we operate or, depending on the magnitude of price decreases, even to suspend certain of our projects and operations and impair certain 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 years, effectively driving global prices for iron ore and steel. In 2018, China accounted for 71% of the global seaborne iron ore trade and 88% of our iron ore export sales were to the Asian market, mainly China. China is also the largest steel producer in the world, accounting for approximately 52% of the global steel production in 2018.

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 6.6% in 2018, as compared to 6.8% in 2017 and 6.7% in 2016.

In addition, the ramp-up of projects started in past years by major iron ore suppliers could affect seaborne iron ore prices and adversely affect us. In addition, the recent upsurge in iron ore prices could also stimulate high cost producers to resume operations, expanding our supply base, which may adversely affect 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 27%, 23% and 25% of our total net revenues in 2016, 2017 and 2018, respectively. Operating at significant idle capacity during periods of weak demand may expose us to higher unit production costs since a significant portion of our cost structure is fixed in the short-term due to the high capital intensity of mining operations. In addition, efforts to reduce costs during periods of weak demand could be limited by labor regulations or labor or government agreements.

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

***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 2018, raw material costs accounted for 61% 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. 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, 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 States' adoption of Section 232 measures, the European Union initiated a safeguard investigation into imports of 26 categories of steel products. In February 2019, a definitive E.U. regulation imposed safeguard measures on imports of certain steel products and imposed quotas for the next three years. In the United States, Section 232 subjects us to a quota for exports of slabs, hot and cold-rolled steel sheets, pre-painted and tin foil. In Europe, we are subject to a quota for exports of hot and cold-rolled steel sheets and tin foil. Because we were already subject to an anti-dumping duty of \$53.4 EUR/ton of hot-rolled sheets in Europe, these developments did not affect our hot-rolled sheets exports to Europe.

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, as well as water grants, 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 governmental entities, 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.

Given recent accidents of other mining companies in the cities of Mariana and Brumadinho, in the state of Minas Gerais, involving the breaking of upstream mining dams, which we also operate (but all of which are inactive), the Federal government, the state government of Minas Gerais and other authorities have imposed and may impose more stringent licensing requirements, environmental, health and safety standards, the relocation of persons living close to our dams, as well as other measures, which could adversely affect us. The National Mining Agency (*Agência Nacional de Mineração*), or ANM, has determined that all upstream dams in Brazil must be decommissioned or adapted to other methods by 2021 for inactive dams and by 2023 for active dams, and similar regulation has been passed by the state of Minas Gerais and its environmental bodies, requiring decommissioning by 2022. Further new or more stringent environmental licensing requirements for our project operations, specifically for our dams, could be imposed on us. In addition, environmental agencies have intensified the frequency of inspections of tailings dams, including ours.

In addition, in July 2018, the Federal Prosecutor's Office and the State Public Prosecutor of Rio de Janeiro filed a public civil action (*ação civil pública*) against us, HARSCO and the state environmental agency (*Instituto Estadual do Ambiente*), or INEA, for immediate removal of slag piles in the city of Volta Redonda, in the state of Rio de Janeiro, that adjoin the Paraíba do Sul River.

The amount and timing of these and other 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, which could subject us to civil, administrative or criminal liability and closure orders. Any of the above events, among others, may adversely affect us and our ability to obtain expected returns 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. 13,540/2017, originated from Executive Order No. 789/2017, was enacted, increasing the CFEM rate for our mining activities and altering its calculation basis. Further changes to the CFEM regime or increase in applicable rates could adversely affect us.

***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, 2018, our total debt outstanding was R\$28,827 million, comprising R\$5,653 million of short-term debt and R\$23,174 million of long-term debt. We had R\$2,248 million in cash and cash equivalents as of December 31, 2018. Our planned investments across our business segments will require a significant amount of cash over the course of 2019 and following years. See “Item 4D. Property, Plant and Equipment—Acquisitions and Dispositions.”

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 ADSs, as well as to fund our operations, working capital and capital expenditures necessary for the maintenance and expansion of our business activities.

Our ability to refinance our indebtedness maturing in 2019 and 2020 is subject to market conditions and creditor approvals. In the event conditions are not favorable or approvals are not obtained, we will be required to make significant payments in the next 16 months under our financings, which would adversely affect our financial and cash position and may result in downgrades in our credit ratings.

***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, 2018, our Fitch, Moody's and S&P credit ratings were B-, 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.

***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 ship loaders, 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 and accidents involving our tailings dams. 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.

***Failures in or interruptions to our telecommunications, information technology systems or automated machinery could adversely affect us.***

Our operations are heavily reliant on telecommunications, information technology systems and automated machinery. Disruptions to these systems, caused by obsolescence, technical failures or intentional acts, may adversely affect us. In addition, any failure in our systems related to confidential information, caused by external cyber attacks or internal actions, including negligence or misconduct of our employees, could have a negative impact on our reputation and our interactions with competitors and other third parties, including governmental and regulatory bodies, suppliers and

others.

Our information technology systems may be vulnerable to external factors such as natural disasters, viruses, cyber attacks and other security breaches. Any damage or interruption to our information technology systems may adversely affect our results of our business and expose us to fines and litigation.

***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), 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 renewed with domestic and foreign insurers and reinsurers and is valid until March 31, 2020, with a limited indemnity of US\$600 million (for an insured value of US\$9.1 billion) and a deductible of US\$385 million for material damages and 45 days to 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 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;
- environmental remediation costs;
- 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 support the creation of an integral protection conservation unit, as privately owned conservation areas (*Reserva Particular do Patrimônio Natural*), or national parks, 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 reduction in carbon emissions 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 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. At the federal level, the environmental national council, (*Conselho Nacional do Meio Ambiente*), or CONAMA, issued Resolution No. 436/2011 to address air emissions that obliged steel companies to comply with certain emission standards as of December 2018, including adjustments in the filters of plant chimneys. In September 2018, we entered into a TAC with the state of Rio de Janeiro relating to this resolution. Any failure to comply with these or other laws, resolutions and standards may expose us to civil, criminal and administrative liability. 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 was issued in June 2018, 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, 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. With regard to our mining activities, as a result of recent accidents of other mining companies in the cities of Mariana and Brumadinho, in the state of Minas Gerais, involving the breaking of upstream mining dams, which we also operate, but all of which are inactive, further new or more stringent environmental licensing requirements for our project operations, specifically for our dams, could be imposed. ANM has determined that all upstream dams in Brazil must be decommissioned or adapted to other methods by 2021 for inactive dams and by 2023 for active dams, and similar regulation has been passed by the state of Minas Gerais and its environmental bodies, requiring decommissioning by 2022.

In addition, in July 2018, the Federal Prosecutor's Office and the State Public Prosecutor of Rio de Janeiro filed a public civil action against us, HARSCO and INEA, for immediate removal of slag piles in the city of Volta Redonda, in the state of Rio de Janeiro, that adjoin the Paraíba do Sul River. The amount and timing of these and other 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, administrative or criminal liability and closure orders for non-compliance with these regulations, as well as encounter delays in obtaining environmental or other operating licenses. Waste disposal, including our slag piles, and emission practices may result in the need for us to clean up or retrofit our facilities or our disposal locations at substantial costs and/or could result in substantial civil, criminal and administrative liability, including, among others, pursuant to public civil actions. 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.

***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, and we may be unable to identify wrongdoing or improper activities by members of our management, employees or third parties. 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, 2018, CSN's internal control over financial reporting is effective.

***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 transportation in the Northeastern region of Brazil; (iv) a joint venture with Engie Brasil Energia S.A. and Companhia de Cimento Itambé, or 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., or Vale, and CEMIG Geração e Transmissão S.A.), or Aliança, and AngloGold Ashanti Córrego do Sítio Mineração S.A., or AngloGold, 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.

***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, potential changes or complications involving metallurgical and other technological processes arising during the life of a project may result in delays and cost overruns that may render the project not economically feasible.

***Our mineral reserve 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

We may fail to maintain an effective system of internal controls, which could prevent us from timely and accurately r

that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. As a result, no assurance can be given that the indicated amount of ore will be recovered or that it will be recovered at the rates we anticipate. Estimates of different engineers may vary, and results of our mining production subsequent to the date of an estimate may lead to revision of estimates. Reserve estimates and estimates of mine life may require revision based on actual production experience and other factors. For example, fluctuations in the market prices of minerals and metals, reduced recovery rates or increased operating and capital costs due to inflation, exchange rates or other factors may render proven and probable reserves uneconomic to exploit and may ultimately result in a restatement of reserves.

In addition, reserves are gradually depleted in the ordinary course of our exploration activities. As mining progresses, distances to the primary crusher and to waste deposits becomes longer and pits become steeper. Also, for some types of reserves, mineralization grade decreases and hardness increases at increased depths. As a result, over time we may experience rising unit extraction costs with respect to

each mine, or we may need to make additional investments, including adaptation or construction of processing plants and expansion or construction of tailings dams. Our exploration programs may also fail to result in the expansion or replacement of reserves depleted by current production. If we do not enhance existing reserves or develop new operations, we may not be able to sustain our current level of production beyond the remaining lives of our existing mines. See “Item 4B—Business Overview—Our Mining Segment—Mineral Reserves.”

***Natural and other disasters, 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 us.

***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

We may fail to maintain an effective system of internal controls, which could prevent us from timely and accurately r

sell certain assets and/or extend our debt amortization profile, we may not be able to maintain adequate liquidity and our cash flows from operations and available capital may not be sufficient to meet our obligations.

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

A substantial number of our employees and some of the employees of our subcontractors are represented by labor unions and are covered by collective bargaining or other labor agreements, which are subject to periodic renegotiation. Strikes and other labor disruptions at any of our facilities or labor

disruptions involving third parties who may provide us with goods or services have in the past and may in the future materially and adversely affect the 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.

Certain judicial or administrative proceedings may adversely affect our shareholders and holders of the ADSs, specifically their receipt of dividends. In August 2018, a federal court of tax enforcement blocked our distribution of an extraordinary dividend in the amount of R\$890.0 million due to ongoing tax proceedings we are party to, which ruling was reversed in December 2018.

**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. In addition, the interests of the members of our controlling family have not always been aligned and any conflicts that may arise may adversely affect us.

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

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. Pursuant to CMN Resolution No. 4,373, in order for an investor to surrender ADSs for the purpose of withdrawing the shares represented thereby and be entitled to trade the underlying shares directly on the B3, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank and the CVM to act as its legal representative, who shall be responsible, among other things, for keeping and updating the investors' certificates of registrations with the Central Bank. If you surrender ADSs and withdraw common shares you may be subject to a less favorable tax treatment on gains with respect to these investments. Moreover, if such representatives fail to obtain or update the relevant certificates of registration, investors may incur in additional expenses or be subject to operational delays which could affect their ability to receive dividends or distributions relating to the common shares or the return of their capital in a timely manner. The custodian's certificate of registration or any foreign capital registration directly

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obtained by such holders may be affected by future legislative or regulatory changes, and we cannot assure such holders that additional restrictions applicable to them, the disposition of the underlying common shares, or the repatriation of the proceeds from the process will not be imposed in the future. For a more complete description of Brazilian restrictions on foreign investments and Brazilian foreign investment regulations, see “Item 10. Additional Information—B. Memorandum and Articles of Association—Restrictions on Foreign Investment” and “—A. Selected Financial Data—Exchange Rate Information—Exchange Controls.” For a more complete description of Brazilian tax regulations, including any potential risks regarding the possibility that the sale or disposition of ADSs by a Non-Brazilian Holder may be subject to capital gains tax in Brazil, see “Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations.”

***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 depository. Upon receipt of the voting instructions of the ADS holder, the depository will vote the underlying common shares in accordance with these instructions. If we ask for voting instructions, the depository 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 depository to vote. In addition, the depository 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 60.6% of the aggregate market capitalization of the B3 S.A. – *Brasil, Bolsa, Balcão*, or the B3, as of December 31, 2018.

Although you are entitled to withdraw the common shares underlying the ADSs from the depository 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 depository, 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 depository 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—Description of Capital Stock—Preemptive Rights.”

***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 the ADSs decreased throughout 2018 and, as of December 31, 2018, presented a variation of (11)% as compared to their 2017 year-end trading price. If the trading price of the 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.

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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.

In June 2018, we sold Heartland Steel Processing, LLC (formerly Companhia Siderúrgica Nacional, LLC) to Steel Dynamics, Inc. for US\$400.0 million. We continue our commercial import and distribution activities in the North American market through our U.S. subsidiary Companhia Siderúrgica Nacional, LLC.

## **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,

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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 55% 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 €482.5 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.

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

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 32.9 million tons, 27.4 million tons and 29.6 million tons of iron ore to third parties in 2016, 2017 and 2018, respectively.

### ***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 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***

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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 hold a 29.5% interest in the Itá hydroelectric facility 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 Cogency Global Inc., located at 10 E. 40<sup>th</sup> Street, 10<sup>th</sup> Floor, New York, New York 10016.

Our website is [www.csn.com.br](http://www.csn.com.br). The U.S. Securities and Exchange Commission, or the SEC, maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including our filings, at <http://www.sec.gov>.

## 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.

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 32.9 million tons in 2016 (including 100% of Namisa due to its full consolidation of CSN Mineração), 32.6 million tons in 2017 and 34.8 million tons in 2018. Our mining business also includes TECAR, a solid bulks terminal at Itaguaí Port in the state of Rio de Janeiro, with a capacity to handle 45 million tons per year, and the Bocaina mine, located in the city of Arcos in the state of Minas Gerais, which produces dolomite and limestone, as well as our subsidiary 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, US\$12.92/ton in 2016 and US\$115.75/ton in 2017. In 2018, our production costs decreased 8% as compared to 2017, reaching

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US\$14.58/ton.

***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 34.94% (or 37.27% before non-controlling interest) direct and indirect ownership interest. The railway connects our Casa de Pedra mine to the Presidente Vargas Steelworks and to our terminals at Itaguaí Port, which 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 facilities 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% interest in the Itá hydroelectric facility in the state of Santa Catarina, through a 48.75% equity interest in ITASA. 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 facility, 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 17% of our total flat steel sales in 2018. Direct exports accounted for 5% of our total sales in 2018. 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 2018, SWT accounted for 16% of our total sales, representing 806,000 tons.

## **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

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- 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—Acquisitions and Dispositions.”

### ***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.

For information on planned investments relating to our mining activities, see “Item 4D. Property, Plant and Equipment—Acquisitions and Dispositions.”

### ***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.

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

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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—Acquisitions and Dispositions.”

### **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, that we are looking to divest in order to improve our liquidity position in the short- to medium-term, including in the form of streaming transactions related to our iron ore business and the sale of European assets and a portion of our investment in Usinas Siderúrgicas de Minas Gerais S.A., or Usiminas. 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 Output.”

### ***Slabs***

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

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

Hot-rolled products include heavy and light-gauge hot-rolled coils and sheets. A heavy gauge hot-rolled product, as defined by Brazilian standards, is a flat-rolled steel coil or sheet with a minimum thickness of 5.01 millimeters. We are able to provide coils of heavy gauge hot-rolled sheet 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.

### ***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;

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- 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.

### ***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;
- *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 that is certified to comply with the International Standardization Organization ISO 9001:2015 standard and the automotive industry's Technical Specification IATF 16949:2016. ISO 9001:2015 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 IATF 16949:2016, third edition, is for the manufacture of hot-rolled flat, pickled and oiled steel products, cold-rolled and galvanized steel products.

***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:

<b><u>Crude Steel Production</u></b>	<b>Brazil</b>	<b>CSN</b>	<b>CSN % of Brazil</b>
	<i>(in millions of tons)</i>		
<b>2018</b>	34.7	4.0	11.5%
<b>2017</b>	34.3	4.2	12.2%
<b>2016</b>	30.2	3.0	9.9%

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

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

#### **Certain Operating Statistics**

	<b>2018<sup>(1)</sup></b>	<b>2017</b>	<b>2016</b>
	<i>(in millions of tons)</i>	<i>(in millions of tons)</i>	<i>(in millions of tons)</i>
<b>Production of:</b>			
<b>Molten Steel</b>	4.1	4.3	3.1
<b>Crude Steel</b>	4.0	4.2	3.0
<b>Hot-Rolled Coils and Sheets</b>	4.0	3.9	3.3
<b>Cold-Rolled Coils and Sheets</b>	2.8	2.5	2.3
<b>Galvanized Products</b>	1.7	1.8	1.8
<b>Tin Mill Products</b>	0.5	0.5	0.5

(1) Considering production output of Heartland Steel Processing, LLC, through May 2018. In June 2018, we sold our entire interest in Heartland Steel Processing, LLC.

#### ***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.

##### *Iron Ore*

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

##### *Coal*

In 2018, our metallurgical coal consumption totaled 2.11 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 production costs. Our total PCI coal consumption in 2018 totaled 0.483 million tons, all of which was imported. The sources of the hard coking coal consumed in our plants in 2018 were: United States (48.0%), Australia (46.8%), Mozambique (3.2%) and Colombia (2.0%), and for PCI: Russia (84.6%) and Australia (15.4%).

##### *Coke*

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In 2018, in addition to the approximately 1.167 million tons of coke we produced, we also consumed 0.946 million tons of coke bought from third parties in China and Colombia, which represented an increase of 6.58% as compared to our consumption in 2017.

### *Limestone and Dolomite*

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

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

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

- Limestone and dolomite calcination: with a granulometry between 32 and 76 mm, they are used in the lime plant in Volta Redonda to produce calcitic and dolomitic lime, for further use in the steelmaking process and sintering. At the steelworks, lime is used for chemical controlling of liquid slag, in order to preserve the refractory of the converters and assist in the stabilization of the chemical reactions that occur during the steel manufacturing process. During sintering, the purpose of lime is to increase the performance of this process and the final quality of the sinter that is produced.
- Limestone and dolomite fines for sintering: used in the production of “sinter” in our steelworks. The sintering process mixes and heats together with fine ores, solid fuel and flux, producing a highly reactive granulated burden. The sinter is used in blast furnaces as the main source of iron for the production of pig iron.
- 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. We typically purchase aluminum and tin from third-party domestic suppliers and zinc from third-party domestic and international suppliers under one year contracts. We purchase part of our tin from our subsidiary ERSA. We maintain approximately 30, 18 and 22 days' inventory of tin, aluminum and zinc, respectively, at the Presidente Vargas Steelworks.

### *Other Raw Materials*

In our production of steel, we consume, on an annual basis, significant amounts of spare parts, refractory bricks and lubricants, which 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 2018, we used 638,894 tons of oxygen to produce 4.0 million tons of crude steel.

### *Water*

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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, 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 2018, our Presidente Vargas Steelworks consumed approximately 2.88 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 hold a 29.5% interest in the Itá hydroelectric facility 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 Minas Gerais, from which we have an average of 167 MW and 23 MW of ensured energy, 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 is located near our blast furnace and uses outlet gases from our iron production to generate energy.

#### *Natural Gas*

The market for natural gas is strongly correlated with the electricity market and we consume both natural gas and electricity, mainly in our hot strip mill. Companhia Estadual de Gás do Rio de Janeiro S.A., or CEG Rio, which was privatized in 1997, is currently our major source of natural gas. To secure natural gas supply, in 2007, we signed a five-year “take-or-pay” agreement with CEG Rio, pursuant to which we committed to acquire at least 70% of the gas volume it provides. If we do not acquire this minimum volume, we may compensate the difference in amount paid in future years up to one year after the contract’s termination. The agreement’s term is until June 30, 2019 and we are negotiating a new agreement. In 2018, the Presidente Vargas Steelworks consumed 390.3 million cubic meters of natural gas.

#### *Diesel Oil*

In January 2017, we entered into agreements with Companhia Brasileira de Petróleo Ipiranga, or Ipiranga, to receive diesel oil in order to supply our equipment in our mining plants in the state of Minas Gerais, which provide the iron ore, dolomite and limestone used in our steel plant in Volta Redonda.

In 2018, our diesel oil consumption totaled 56,528 kiloliters, used to produce 27,875 million tons of iron ore, for which we paid R\$133.6 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.

In 2016, 2017 and 2018, we consumed 245,000 tons, 60,346 tons and 19,477 tons, respectively, of third party slabs.

Our main raw materials suppliers are set forth below:

#### **Main Suppliers**

Ternium  
 BHP, Contura, Carbo One Limited, Vale, Warrior and Trafigura  
**CI Milpa, Sinochem, Noble and Trafigura**  
**Ibrame, Latasa, and Nova Metais**  
**Votorantim Metais, Reciclyn, Zinco Ligas, Latasa and Trafigura**  
 ERSAs and Melt Metais  
 Sotreq, Komatsu, Mason, Minas Maquinas and CVB

#### **Raw Material**

Slabs  
 Coal  
 Coke  
 Aluminum  
 Zinc  
 Tin  
 Spare parts

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RHI Magnesita, Vesuvius and Saint Gobain  
Ipiranga and Cosan

Refractory bricks  
Lubricants

### *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 120,000 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.

#### *Prada*

We have a 99.99% ownership interest in Companhia Metalúrgica Prada. Established in 1936, Companhia 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 Companhia Metalúrgica Prada's main raw material, making it one of our most important customers. Companhia 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. Lusosider, Aços Planos, S.A.

We own indirectly 99.99% of Lusosider Aços Planos S.A., or 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

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coils, 120,000 tons of cold-rolled steel products and 270,000 tons of galvanized steel 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 than 200 types of sections according to different German and international standards.

*SWT's Production Output*

	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b><u>Production of:</u></b>			
<b>Beam Blank (Crude Steel)</b>	871	862	823
<b>Long Steel (Finished Products)</b>	818	801	782

***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*

Our scrap consumption in 2018 was just under 1.0 million tons, as compared to 0.97 million tons of scrap in 2017, and accounted for approximately 63% and 65% of our production costs in 2018 and 2017, 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*

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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:

**Main Suppliers**

**Scholz, TSR**  
**RWE Supply & Trading GmbH**  
**Shell Erdgas Marketing GmbH & Co KG**  
**Refractories Site Service GmbH**  
**Graftec, W.A.S., SHOWA DENKO**  
**Siemens, Schneider, Voith**  
**Irlle, Walzengießerei Coswig**  
*Facilities - SWT*

**Raw Material**

Scrap  
 Electric energy  
 Natural gas  
 Refractory  
 Electrodes  
 Spare parts  
 Rolls

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**

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

*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

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for wire rod and reinforcing bar. We expect this plant to reach an 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 383,000 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 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.

### ***Production Output***

#### **Certain Operating Statistics**

*(in thousands of tons)*

#### **Production of:**

	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Billets (Crude Steel)</b>	203	211	197
<b>Long Steel (Finished Products)</b>	199	202	186

### ***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 in our blast furnace. 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

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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 run of mine 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 facilities.

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:

#### *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.

Engenho mine began operations in 1950. We mine its iron ore using the same fleet used as Casa de Pedra mine and, when necessary, a support fleet. We also have equipment operating in the dam and yard.

The ROM from our Engenho Mine can be processed in the Central Plant, Mobile Plants or in the Pires treatment facilities. We use electrical power provided by hydroelectric facilities at our Engenho mine and from the Pires Complex.

#### *Fernandinho Mine*

Fernandinho mine is located in the city of Itabirito, in the state of Minas Gerais. This city is located in the Mid-Eastern region of the state of Minas Gerais and approximately 40 km from the city of Belo Horizonte. Fernandinho mine is an open pit mine and is accessible from the cities of Belo Horizonte or Itabirito through mostly paved roads.

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

#### *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.

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



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

Our extraction and preparation of limestone and dolomite takes place at our Bocaina mining facility located in the city of Arcos, in the state of Minas Gerais. Our Bocaina mining facility 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 paved roads.

The ore in this mine is excavated by a fleet of wheel loaders, excavators and tire tractor, and is transported by a fleet of trucks, in support we have a fuel truck, water truck, as well as additional heavy equipment.

This mining facility has an installed annual production capacity of approximately 12.0 million tons and has sufficient limestone and dolomite reserves to adequately supply our steel production, at current levels, for approximately 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***

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 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:

<b>Mine</b>	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	<b>CSN % interest</b>
<b><u>Iron:</u></b>				
<b>Casa de Pedra (Congonhas, Minas Gerais)</b>	Open pit	1913 2007 (Start of operation by Namisa)	2040	87.52
<b>Engenho (Congonhas, Minas Gerais)</b>	Open pit		2040	87.52
	Open pit		2039	100

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**Fernandinho  
(Itabirito,  
Minas Gerais)**

2007 (Start of  
operation by  
Namisa)

**Limestone and  
Dolomite:**

**Bocaina (Arcos, Minas  
Gerais)**

Open pit

1946

2057

100

**Tin:**

**Santa Barbara (Itapuã  
do Oeste, Rondônia)**

Open pit

1950

2054

100

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 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.

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:

Mine Name and Location	Proven and Probable Reserves <sup>(1)</sup>				Grade <sup>(3)</sup>	Rock Type	Recoverable Product <sup>(4)</sup> (in millions of tons)
	Audited Reserves		Ore Tonnage <sup>(2)</sup>				
	(in millions of tons) Proven <sup>(5)</sup>	(in millions of tons) Probable <sup>(6)</sup>	(in millions of tons) Proven <sup>(5)</sup>	(in millions of tons) Probable <sup>(6)</sup>			
<b>Iron:</b>							
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%)	
<b>Limestone and Dolomite:</b>							
Bocaina (Arcos, Minas Gerais)	275	0.2	275	0.2	50.25% CaO 16.0% MgO	Limestone (94.46%) 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 run of mine 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.

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(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 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.

	<b>Price for the three years prior to the audit</b>			<b>Long term average</b>
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>(US\$/t) Assumption</b>
<b>Platts 62Fe CFR N.China (\$/dmt)</b>	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% SiO<sub>2</sub>. This new estimate of our iron ore reserves at Casa de Pedra is significantly larger than our estimate of 1,631 million tons, contained in an appraisal report prepared in 2006 by Golder Associates. Over the course of the Casa de Pedra mine's life, we have executed 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% SiO<sub>2</sub>.

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.

### *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 Fernandinho mine are idle.

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

We may fail to maintain an effective system of internal controls, which could prevent us from timely and accurately r

	<b>Production<sup>(1)</sup></b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Casa de Pedra<sup>(2)</sup> (Mt)</b>	<b>26.24</b>	<b>29.46</b>	<b>26.05</b>
Grade (%)	63.8%	63.1%	62.1%
<b>Pires<sup>(2)</sup> (Mt)</b>	<b>1.6</b>	<b>2.71</b>	<b>3.87</b>
Grade (%)	63.9%	61.0%	60.4%
<b>Fernandinho<sup>(2)</sup> (Mt)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.03</b>
Grade (%)	-	-	61.6%

(1) 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.

<b>Consolidated Sales (Mt)</b>	<b>CSN Consolidated Sales<sup>(1)</sup></b>		
	<b>2015</b>	<b>2016<sup>(2)</sup></b>	<b>2017<sup>(2)</sup></b>
	<b>25.67</b>	<b>36.98</b>	<b>27.36</b>

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

(2) Since December 2015, we have been considering 100% stake of Congonhas Minérios.

### *Dams*

The following table sets forth certain information on the dams we operate:

<b>Name of the Dam/Dike</b>	<b>Company / Entrepreneur</b>	<b>Main Use</b>	<b>Substance</b>	<b>Height (m)</b>	<b>Capacity (m<sup>3</sup>)</b>	<b>Construction Method</b>	<b>Licensing / Certification</b>
<b>Casa de Pedra<sup>(1)</sup></b>	CSN Mineração	Containment of mining tailings	Iron ore	84.00	65,000,000	Downstream	Mar
<b>B4</b>	CSN Mineração	Containment of mining tailings	Iron ore	65.00	13,001,821	Upstream	Mar
<b>B5</b>	CSN Mineração	Containment of mining tailings	Iron ore	41.00	5,393,580	Single stage	Mar
<b>Batateiro de Baixo dike</b>	CSN Mineração	Containment of mining tailings	Gravel	16.00	18,300	Single stage	Mar
<b>Pilha da Vila II dike</b>	CSN Mineração	Containment of mining tailings	Gravel	28.00	18,556	Single stage	Mar
<b>Bichento IIIA dike</b>	CSN Mineração	Containment of mining tailings	Gravel	15.50	116,696	Single stage	Mar
<b>Esmeril IV dike</b>	CSN Mineração	Containment of mining tailings	Gravel	38.00	282,079	Single stage	Mar
<b>Lagarto dam</b>	CSN Mineração	Containment of mining tailings	Gravel	8.00	210,000	Single stage	Sep
<b>Poço Fundo dam</b>	CSN Mineração	Containment of mining tailings	Gravel	3.00	12,000	Single stage	Sep
<b>Vigia auxiliary dam</b>	Minérios Nacional	Containment of mining tailings	Iron ore	35.00	3,140,693	Upstream	Mar
<b>B2 dam</b>	Minérios Nacional		Iron ore	40.00	2,616,466	Upstream	Mar

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		Containment of mining tailings					
<b>B2 auxiliary dam<sup>(2)</sup></b>	Minérios Nacional	Containment of mining tailings	Iron ore	33.00	6,439,465	Upstream	Mar
<b>Engenho dike</b>	Minérios Nacional	Containment of mining tailings	Gravel	10.00	8,821	Single stage	Mar
<b>Vigia dam</b>	Minérios Nacional	Containment of mining tailings	Iron ore	30.00	812,901	Upstream	Mar
<b>Ecológica 1 dam</b>	Minérios Nacional	Containment of mining tailings	Gravel	15.00	41,000	Single stage	Mar
<b>Ecológica 2 dam</b>	Minérios Nacional	Containment of mining tailings	Gravel	6.50	104,000	Single stage	Mar
<b>B1 - Água Preta</b>	Companhia Siderúrgica Nacional	Containment of mining tailings	Manganese ore	17.00	100,000	Single stage	Mar
<b>B2 - Água Preta</b>	Companhia Siderúrgica Nacional	Containment of mining tailings	Manganese ore	29.00	265,000	Upstream	Mar
<b>B2 dam</b>	Companhia Siderúrgica Nacional	Water storage and catchment	Dolomite	15.00	398,200	Center line	Sep
<b>B3 dam</b>	Companhia Siderúrgica Nacional	Containment of limestone	Limestone	10.00	1,065,560	Single stage	Sep
<b>PIT-01</b>	Estanho de Rondônia	Containment of mining tailings	Deposit of tin	14.30	4,100,000	Natural dam	Mar
<b>Taboquinha 01 - Crente</b>	Estanho de Rondônia	Containment of mining tailings	Deposit of tin	18.00	2,941,251	Upstream	Mar
<b>Taboquinha 02 - Serra Azul</b>	Estanho de Rondônia	Containment of mining tailings	Deposit of tin	19.00	1,983,201	Upstream	Mar
<b>Taboquinha 03</b>	Estanho de Rondônia	Containment of mining tailings	Deposit of tin	16.00	1,708,100	Single stage	Mar
<b>Taboquinha 04</b>	Estanho de Rondônia	Containment of mining tailings	Deposit of tin	16.00	2,253,100	Single stage	Mar
<b>Igarapava</b>	Aliança Geração de Energia S.A.	Hydroelectric	Water	42.10	241,840,000	Soil – concrete face rockfill	Jan/
<b>Itá (dam)</b>	Engie Brasil	Hydroelectric	Water	125.00		Concrete face rockfill	Mar
<b>Itá (dike 1)</b>	Engie Brasil	Hydroelectric	Water	22.00		Compressed soil, upstream	Mar

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						protection with riprap rock and downstream protection with grass Compressed soil, upstream protection with riprap rock and downstream protection with grass Compressed soil, upstream protection with riprap rock and downstream protection with grass	
<b>Itá (dike 2)</b>	Engie Brasil	Hydroelectric	Water	22.00			Mar
<b>Itá (dike 3)<sup>(3)</sup></b>	Engie Brasil	Hydroelectric	Water	29.00			Mar/18

\* All tailings dams were last certificated in March 2019.

(1) The Casa de Pedra dam comprises B2, B3 and B6 underwater dams, flooded by its reservoir.

(2) In regard to B2 auxiliary dam, which stability was not assured and declared in the last report, dated September 2018, Minérios Nacional clarifies that it has been meeting the works schedule regarding the structure’s stabilization, as determined by the designer and independent external audits, and has been carrying out the measures issued by the Prosecutor’s Office of the state of Minas Gerais, as confirmed by an expert report issued by the analyst of the Prosecutor’s Office.

(3) The dam and dikes (1, 2 and 3) comprise the reservoir of Itá hydroelectric.

Since the accident of another mining company in 2015 in the city of Mariana, in the state of Minas Gerais, involving the breaking of an upstream mining dam, we implemented a change in our processes to reduce tailings deposits. We invested R\$400 million in our dams, and our operations, which we have shifted from wet stacking to dry stacking, will be independent of tailings dam use by the end of 2019. After the accident of another mining company in January 2019 in the city of Brumadinho, in the state of Minas Gerais, also involving the breaking of an upstream mining dam, we have continued to execute our plan for the decommissioning or decharacterization of our six inactive tailings dams. All of our upstream dams are inactive.

Our only active tailings dam, Casa de Pedra, was constructed in the downstream method, which provides for enhanced resilience and safety. We do not operate any active upstream tailings dams.

### ***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 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 “—Our Logistics Segment—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 comprised of railway and port facilities.

### ***Railways***

#### *Southeastern Railway System*

MRS has a 30-year concession to operate, through the year 2026 and renewable for an equal period of 30 years, Brazil's Southeastern railway system. As of December 31, 2018, we held 34.94% (or 37.27% before non-controlling interest) 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 24% 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 Rede Ferroviária Federal S.A., or 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

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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 which 1,191 km are operational and the rest are in negotiation 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, 2018, R\$79 million in concession payments were outstanding over the remaining nine years of the concession.

(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, 2018, 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 the Northeast National Development Fund (*Fundo Nacional 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 shareholders. 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*, or 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 *Fundo Constitucional de Financiamento do Nordeste*, or FNE, has been already taken by TLSA.

The TCU 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 will be relevant to, and may include, the settlement of the TCU and ANTT 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 m<sup>2</sup>, the terminal consists of a concrete molded berthing pier superposed on jacketed stilts connected to the mainland by an access bridge perpendicular to the berthing pier. Its backyard includes conveyor belts, an internal road system, bulk storage yards, a railway looping, as well as industrial and administrative facilities.

Our imports of coal and coke and exports of iron ore occur through this terminal. Under the terms of the concession, we have the obligation to 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.

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*Container Terminal*

We indirectly own 100% of TECON, which has a concession to operate the container terminal at Itaguaí Port for a 25-year term expiring in 2026, which is renewable for an additional 25 years. As of December 31, 2018, approximately R\$281 million of the cost of the concession was outstanding and payable over the remaining eight 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 2016, this area represented

more than 53% of the Brazilian GDP, according to the Brazilian Geography and Statistics Institute (*Instituto Brasileiro de Geografia e Estatística*), or the IBGE.

Favorable natural conditions, like natural 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. 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. These included dredging to improve maritime access and berths depth and achieving certification of the new draft for 15.4 meters in depth, including tides, which is the deepest in the East coast of South America. In 2018, we continued to invest in the modernization of our operating facilities with the installation of new equipment (balances, cameras and OCR) and safety improvements in the fire detection and protection system (SPCI) and protection against atmospheric discharges system (SPDA).

In 2019, TECON is bidding for acquisition of two new quay cranes, nine RTGs (Rubber Tyred Gantry Cranes), two high capacity fork-lifts and a new IT system. TECON will invest in its expansion in order to increase its capacity by approximately 40%, which would make it one of the largest port terminals in Brazil, with a nominal capacity of 1,000,000 TEUs. This expansion project, which is under discussion with regulatory agencies, includes a 273m quay extension, with a total resulting length of 1,083 meters, acquisition of two new gantry cranes (ship-to-shore) for ultra large container carriers, acquisition of 10 RTGs, dredging of an access channel, turning basin/berth and construction of an overpass connecting its two areas.

In 2018, TECON moved 247,000 containers, 778,000 tons of steel products and 15,000 tons of general cargo, as compared to 188,000 containers, 989,000 tons of steel products and 9,000 tons of general cargo in 2017 and 140,000 containers, 804,000 tons of steel products and 14,000 tons of general cargo in 2016. The increased volume of containers, mainly due to transshipment throughput, which had an increase of 89% in 2018 and is concentrated in TECON due to its deep-water characteristics, positively affected TECON's results in 2018. Container exports from Brazil increased 32% in 2018, according to the Ministry of Development, Industry and Foreign Trade (*Ministério da Indústria, Comércio Exterior e Serviços*).

## **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.

We may fail to maintain an effective system of internal controls, which could prevent us from timely and accurately r



All transportation of raw materials within the plant is carried out by conveyor belts, placing inputs in scales according to a predefined formula and delivering them to the mills. There are two grinding lines in each of Volta Redonda and Arcos, 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 32 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***

We and ENGIE each own 48.75% of ITASA, a special-purpose company formed to own and operate, under a 30-year concession granted in 2000, 60.5% of the Itá hydroelectric facility on the Uruguay river in Southern Brazil. 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. Other consortium members are Aliança, L.D.R.S.P.E. Geração de Energia e Participações Ltda. and AngloGold. The facility has an installed capacity of 210 MW.

## **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

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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 2018, we sold steel products to customers in Brazil and in 30 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 in light of variations in the domestic and international markets, as well as domestic and international steel demand and prices.

The two main export markets for our products are Europe and North America, representing approximately 69% and 23%, respectively, of our export sales volume in 2018.

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

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

	2018				2017				2016			
	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
<b>Brazil</b>	3,327	66%	10,143	66%	2,841	58%	7,819	60%	2,784	57.31%	6,815	60.82%
<b>Export</b>	1,742	34%	5,195	34%	2,081	42%	5,14	40%	2,073	42.69%	4,391	39.18%
<b>Total</b>	<b>5,069</b>	<b>100%</b>	<b>15,338</b>	<b>100%</b>	<b>4,922</b>	<b>100%</b>	<b>12,959</b>	<b>100%</b>	<b>4,857</b>	<b>100%</b>	<b>11,205</b>	<b>100%</b>
<b>Exports by Region</b>												
<b>Asia</b>	13	1%	41	1%	13	1%	23	1%	18	1%	31	1%
<b>North America<sup>(1)</sup></b>	393	23%	1472	28%	651	38%	1931	44%	759	36.62%	1802	41.05%
<b>Latin America</b>	113	6%	370	7%	180	19%	507	22%	95	4.58%	260	5.91%
<b>Europe</b>	1206	69%	3244	63%	1223	41%	2567	32%	1189	57.34%	2269	51.69%
<b>All Others</b>	16	1%	58	1%	14	1%	36	2%	12	1%	29	1%

(1) Sales to Mexico are included in North America.

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

*Sales by Product*

The following table sets forth our sales breakdown by product in Brazil in each of the last three years.

<b>CSN Domestic Sales Breakdown</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Hot-Rolled Products	34%	34%	33%
Cold-Rolled Products	19%	18%	18%
Galvanized Products	33%	29%	30%
Tin Plates Products	8%	10%	13%
Long Steel	6%	8%	6%

*Sales by Industry*

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

<b>Sales Breakdown</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<i>(in percentages of total domestic volume shipped)</i>		
<b>Distribution Network</b>	43%	41%	47%
<b>Packaging</b>	9%	11%	13%
<b>Automotive</b>	23%	22%	15%
<b>Home Appliances</b>	10%	9%	9%
<b>OEM</b>	4%	4%	4%
<b>Construction</b>	12%	13%	11%

We believe we have a particularly strong domestic and export position in the sale of tin plates 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" and "Item 5A. Operating Results—Results of Operations—Year 2018 Compared to Year 2017—Net Operating Revenues."

*Seasonality*

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

***Long Steel – SWT***

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

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

Our commercial area is responsible for sales of all of our products worldwide. This area is divided into the direct sales team which is organized in 13 agencies located in Germany and 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

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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.

### ***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.

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



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

In 2018, our iron ore sales reached 34.8 million tons, 29.5 million tons to third parties and 5.2 million tons to CSN steel mills, an increase of 7% compared to 2017. Since December 2015, we have sold iron ore volumes to Presidente Vargas Steelworks, which has increased our revenues from the domestic market. Before December 2015, because iron ore volumes were transferred from our iron ore mine to Presidente Vargas Steelworks, these were not reflected in our iron ore revenues. Total mining net revenue increased 30% in 2018, mainly due to higher volumes sold. The share of mining segment revenue in our total net revenue increased from 23% in 2017 to 25% in 2018.

In 2018, 88% of our iron ore export sales went to the Asian market, mainly China, and 12% were sold in the European market. Of our total sales volume to third parties, 80% were sinter feed, 9% pellet feed, 10% lump ore and 1% concentrated.

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

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

### **Cement**

We 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.

### **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), 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 renewed with domestic and foreign insurers and reinsurers and is valid until March 31, 2020, 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.

### **Intellectual Property**

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 renewed with domestic and foreign insurers and reinsurers and is valid until March 31, 2020, 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.

### **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,

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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:

	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>Production</b> <i>(in million tons)</i>	<b>Production</b> <i>(in million tons)</i>	<b>Production</b> <i>(in million tons)</i>
<b>Gerdau</b>	6.9	6.8	7.0
<b>Usiminas</b>	3.0	3.1	5.0
<b>ArcelorMittal Tubarão</b>	7.1	7.0	6.8
<b>CSN</b>	4.4	3.1	4.2
<b>ArcelorMittal Aços</b>	2.9	3.1	3.1
<b>Longos</b>	4.5	4.2	4.2
<b>CSA</b>	5.5	3.9	1.9
<b>Others</b>	34.3	31.2	32.2
<b>Total</b>	<b>34.3</b>	<b>31.2</b>	<b>32.2</b>

**Source: IABr**

\* 2018 data was not available as of the date of this annual report.

### ***Competitive Position — Global***

During 2018, Brazil maintained its place as the largest producer of crude steel in South America, with a production output of 34.7 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 for 78% of total production in South America, approximately two thirds more than Mexico's or 40% of the U.S.' steel production.

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.

In 2016, sales in the external market became more attractive than in prior years, 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. In 2018, the *real*'s depreciation against the U.S. dollar, flat steel production and increased household consumption were mainly responsible for the 1.1% increase in the Brazilian GDP.

### **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, which is the federal body responsible for enacting technical regulations and environmental protection standards, and by the Brazilian Institute of Environment and Renewable Natural Resources (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* – 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 and Volta Redonda’s Environment Municipal Secretary. 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 (*Conselho Estadual de Política Ambiental* – COPAM), by the Regional Superintendent of Environment and Sustainable Development (*Superintendência Regional de Meio Ambiente* – SUPRAM), the Water Management Institute of Minas Gerais (*Instituto Mineiro de Gestão das Águas* – IGAM), the State Forestry Institute (*Instituto Estadual de Florestas* – IEF), and the State Environmental Foundation (*Fundação Estadual do Meio Ambiente*), or FEAM, which are the competent bodies of the Secretary of State for the Environment and Sustainable Development of Minas Gerais (*Secretaria de Estado de Meio Ambiente e Desenvolvimento Sustentável*), or SEMAD, the Superintendency of Priority Projects (*Superintendência de Projetos Prioritários* – SUPPRI) and the Municipal Secretariats of the Environment of Congonhas and Belo Vale. 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.

Considering the current mining environment in Brazil following recent accidents of other mining companies in the cities of Mariana and Brumadinho, in the state of Minas Gerais, involving the breaking of upstream mining dams, which we also operate (but all of which are inactive), changes in applicable laws or regulations could require us to modify our technologies and operations and to make unexpected capital expenditures. Capital expenditures that we have already made may not generate the returns we expected, if any. In addition, new or more stringent environmental licensing requirements for our project operations, specifically for our dams, could be imposed on us and we may encounter delays in obtaining environmental or other operating licenses, or not be able to obtain or renew them. 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. For more information, see “Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—Our activities depend on authorizations, concessions, licenses and permits and changes in applicable laws, regulations or government measures could adversely affect us” and “Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—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.”

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

We have an Environmental Management System, or EMS, certified by ISO 14001:2015 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 14001:2015.

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, and the International Integrated Reporting Council (IIRC) methodology 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 we received the Gold Standard of the GHG Protocol for four 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 CSN Mineração plants in Minas Gerais. 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, 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\$354 million in 2018, of which R\$12 million relates to capital expenditures and R\$342 million relate to operational expenditures (OPEX). Our total environmental expenditures were R\$325 million in 2017. Our investments in environmental projects during 2018 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 tailings 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. In addition, new regulations enacted in 2019 require decharacterization or decommissioning of dams constructed using the upstream method. On an annual basis, all our tailings dams are audited by independent audit companies, in accordance with technical standards and relevant legislation. For more information on the dams we operate, see “4B. Business Overview—Our Mining Segment—Dams.” Since the accident of another mining company in 2015 in the city of Mariana, in the state of Minas Gerais, involving the breaking of an upstream mining dam, we implemented a change

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in our processes to reduce tailings deposits. We invested R\$400 million in our dams, and our operations, which we have shifted from wet stacking to dry stacking, will be independent of tailings dam use by the end of 2019. After the accident of another mining company in January 2019 in the city of Brumadinho, in the state of Minas Gerais, also involving the breaking of an upstream mining dam, we have continued to execute our plan for the decommissioning or decharacterization of our six inactive tailings dams. All of our upstream dams are inactive. Our only active tailings dam, Casa de Pedra, was constructed in the downstream method, which provides for enhanced resilience and safety. We do not operate any active upstream tailings dams.

*Other Environmental Proceedings and Liabilities*

Our main environmental issues as of December 31, 2018 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 plant.

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, 2018, we had provisions for environmental liabilities in the total amount of R\$198.4 million, which we believe are sufficient to cover all probable losses. Such amount compares to R\$255.5 million, as of December 31, 2017 and R\$273.5 million as of December 31, 2016. The decrease in our provisions for environmental liabilities in 2018 as compared to 2017 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's 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's Office and by the competent environmental agency in compliance with 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:

	<b>Amounts</b>
	<b>(in millions of R\$)</b>
Term of Undertaking (TAC) <sup>(1)</sup>	6.3
Decommissioned Coal Mines (Santa Catarina)	0.4
Landfills and other <sup>(2)</sup>	4.4
<b>December 31, 2016</b>	<b>273.4</b>
Term of Undertaking (TAC) <sup>(1)</sup>	(3,0)
Decommissioned Coal Mines (Santa Catarina)	(10,4)
Landfills and other <sup>(2)</sup>	(4,6)
<b>December 31, 2017</b>	<b>255,5</b>
Term of Undertaking (TAC) <sup>(1)</sup>	8,2
Decommissioned Coal Mines (Santa Catarina)	(50,8)
Landfills and other <sup>(2)</sup>	(14,5)
<b>December 31, 2018</b>	<b>198,4</b>

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

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

### **Brazil – Mining Regulation**

Under the Brazilian Constitution, all mineral resources in Brazil belong to the federal government. The Brazilian Constitution and Mining 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;

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- 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 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.

Given recent accidents of other mining companies in the cities of Mariana and Brumadinho, in the state of Minas Gerais, involving the breaking of upstream mining dams, which we also operate (but all of which are inactive), new or more stringent environmental licensing requirements for mining project operations, specifically for dams, are under discussion and may be imposed by ANM and environmental regulatory authorities. ANM has determined that all upstream dams in Brazil must be decommissioned or adapted to other methods by 2021 for inactive dams and by 2023 for active dams, and similar regulation has been passed by the state of Minas Gerais and its environmental bodies, requiring decommissioning by 2022. For more information, see "Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—Our activities depend on authorizations, concessions, licenses and permits and changes in applicable laws, regulations or government measures could adversely affect us" and "Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—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."

### *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 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. For further information, see "Item 4D. Property, Plant and Equipment."

### *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

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of local communities where the mines are located. The Mining Code also imposes certain notifications and reporting requirements.

Our mineral rights for Casa de Pedra mine include the mining concession (*manifesto de mina*), a beneficiation plant, roads, a loading yard and a railway branch, and are duly registered with ANM. We have also been granted by ANM easements in 19 mine areas located in the surrounding region. 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.

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 CFEM, which calculation considers the gross revenue, excluding taxes over the selling. ANM is responsible for auditing the mining companies and to enact regulations to ensure the proper payment of CFEM. In December 2017, Law No. 13,540/2017 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 Mining 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.

On December 19, 2017, Law No. 13,540/2017 was enacted, increasing the CFEM rate for mining activities and altering its calculation basis. Additionally, Law No. 13,575/2017, Decree 9,406/2018 and Decree 9,407/2018 provided for several changes to the Brazilian mining sector.

### **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 Brazilian antitrust authority, *Conselho Administrativo de Defesa Econômica*, or 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.

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

***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* – SECEX), and the Commercial Defense Department (*Departamento de Defesa Comercial* – 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, or 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, which was extended to the end of May 2018. After the suspension, Brazil entered into an agreement with the U.S., which established quotas for semi-finished steel products based on average exports between 2015 and 2017 and quotas for finished steel products based on average exports between 2015 and 2017 with a reduction of 30%.

### *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

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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. In February 2019, a definitive E.U. regulation imposed safeguard measures on imports of certain steel products and imposed quotas for the next three years. The quota system is divided into specific quotas for countries which participation in exports is above 5% on all European Union imports, and global quotas for the countries which participation is below 5% of European Union imports. For more information, see “Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—Protectionist and other measures adopted by foreign governments could adversely affect our export sales.”

### *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.

All major producing countries, except for India, decreased their production levels in 2016. According to the WSA, 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.

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In 2017, all the major steel producing countries increased their production levels. Consequently, global steel production reached 1.67 billion tons in 2017, a 5.3% increase compared to 2016. In addition, in 2018, nearly all top 10 steel producing countries increased their production levels and global steel production increased 5.8% as compared to 2017.

*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 92 kilograms in 2017. It is considered low when compared to the levels of some developed countries, such as the United States and Germany.

From 2010 to 2017, the Brazilian GDP grew on average 1.6% per year. 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 (*Associação Nacional dos Fabricantes de Veículos Automotores*), 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. In 2018, although the Brazilian GDP increased 1.1% as compared to 2017, driven by increased household consumption, investments and services, it remained below expectations.

### *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.

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*Capacity Utilization*

Installed capacity in Brazil in each of 2018 and 2017 was estimated at 50.4 million tons.

*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 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. In 2018, steel imports reached 2.4 million tons, which represented an increase of 3.3% as compared to 2017.

For information on the production by the largest Brazilian steel companies, see "Item 4B. Business Overview—Competition in the Steel Industry—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, 2018. For more information, see note 9 to our audited consolidated financial statements included elsewhere herein.

Description	Activity	Country	Location	Location	Title
Companhia Siderúrgica Nacional	Presidente Vargas Steelworks	Brazil	RJ	Volta Redonda	Owned
Companhia Siderúrgica Nacional	Galvanized and Pre-Painted Products	Brazil	PR	Araucária	Owned and Third Parties
Companhia Siderúrgica Nacional	CSN Porto Real Steel Producer	Brazil	RJ	Porto Real	Owned and Third Parties
Companhia Siderúrgica Nacional	Service Center	Brazil	SP	Mogi das Cruzes	Owned
Companhia Siderúrgica Nacional	Service Center	Brazil	BA	Camaçari	Owned
	Service Center	Brazil	SP	Mogi das Cruzes	Owned

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Companhia Metalúrgica Prada						
Companhia Metalúrgica Prada	Service Center	Distributor	Brazil	SP	Bebedouro	Owned
Companhia Metalúrgica Prada	Steel Can	Packaging	Brazil	SP	São Paulo	Owned
Companhia Metalúrgica Prada	Manufacturer Steel Can	Packaging	Brazil	MG	Uberlândia	Owned
Companhia Metalúrgica Prada	Manufacturer					
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	MG	Uberlândia	Owned
CSN Mineração	Iron Ore Mine	Iron Ore Mine	Brazil	MG	Congonhas	Owned and Third Parties
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 Nacional, LLC	CSN LLC	Flat Steel Producer	USA	Indiana	Terre Haute	Owned
Lusosider Aços Planos S.A.	Lusosider	Flat Steel Producer	Portugal	Seixal	Seixal	Owned
Stahlwerk Thüringen GmbH	SWT	Steel Profile	Germany Saalfeld-Rudolstadt		Unterwellenborn	Owned
Companhia Siderúrgica Nacional	Thermoelectric Plant	Energy	Brazil	RJ	Volta Redonda	Owned
Companhia Metalúrgica Prada	Metallic Packaging Plant	Packaging	Brazil	RJ	Resende	Third Parties
Companhia Metalúrgica Prada	Metallic Packaging Plant	Packaging	Brazil	SP	Lins	Third Parties
Companhia Metalúrgica	Metallic Packaging	Packaging	Brazil	GO	Luziânia	Third Parties

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Prada	Packaging Plant Metallic					
Companhia Metalúrgica Prada	Packaging Plant	Packaging	Brazil	RS	Pelotas	Third Parties
Consórcio Usina Hidrelétrica	Hydroelectric Facility	Energy	Brazil	SP	Igarapava	Owned
le Igarapava 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 Siderúrgica Nacional	Steel Distribution Center	Distributor	Brazil	MG	Contagem	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	MG	Contagem	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	MG	Juiz de Fora	Third Parties
Companhia Siderúrgica Nacional	Companhia Siderúrgica Nacional	Cement Distributor	Brazil	SP	Mauá	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Varginha	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Ribeirão Preto	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Guarulhos	Third Parties
Companhia Sideurgica Nacional	Distribution Center	Steel Distributor	Brazil	RS	Caxias do Sul	Third Parties

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



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CSN Mineração	TECAR - Terminal de Carvão	Iron Ore Shipment	Brazil	RJ	Itaguaí	Third Parties
Septetiba Tecon S.A.	TECON - Terminal de Containers	Logistics	Brazil	RJ	Itaguaí	Third Parties
Companhia Siderúrgica Nacional	Cement Plant	Cement Manufacturer	Brazil	RJ	Volta Redonda	Owned
Companhia Siderúrgica Nacional	Clinker and Cement Plant	Cement Manufacturer	Brazil	MG	Arcos	Owned
Companhia Siderúrgica Nacional	Long Steel Plant	Long steel Manufacturer	Brazil	RJ	Volta Redonda	Owned
MRS Logística S.A. Ferrovia	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
Transnordestina Logística S.A. (FTL)	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
Transnordestina Logística S.A. (TLSA)	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	RJ	Rio de Janeiro (Arará)	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	RJ	Rio de Janeiro (Campo Grande)	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Americana	Third Parties
Companhia Siderurgina Nacional	Distribution Center	Cement Distributor	Brazil	RJ	Queimados	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	São José dos Campos	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Osasco	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Steel	Brazil	SP	Jacareí	Third Parties

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 “—Acquisitions and Dispositions” and note 10 to our audited consolidated financial statements included elsewhere herein.

## **Acquisitions and Dispositions**

### *Usiminas*

As of December 31, 2018, we owned, directly and indirectly, 20.3% of the preferred shares and 15.2% of the common shares of 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 and Goodwill.” 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 8A. Consolidated Statements and Other Financial Information—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.

### *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.

### *Companhia Siderúrgica Nacional, LLC*

On June 5, 2018, Companhia Siderúrgica Nacional, LLC, our subsidiary organized in the United States with operations in stripping, cold rolling and galvanizing of flat steel, changed its corporate name to Heartland Steel Nacional, LLC and a new company was established under the name of Companhia Siderúrgica Nacional, LLC, or CSN LLC, as a wholly-owned subsidiary of Heartland Steel Processing, LLC. On June 28, 2018, CSN LLC, became an indirectly wholly owned subsidiary of ours.

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

On June 29, 2018, we sold Heartland Steel Processing, LLC to Steel Dynamics, Inc. for US\$400.0 million. We continue our commercial import and distribution activities in the North American market through CSN LLC. This sale was part of our ongoing divestiture and deleverage plan. For more information, see note 3 to our audited consolidated financial statements included elsewhere herein.

**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, 2018 and 2017, and for the years ended December 31, 2018, 2017 and 2016, included elsewhere herein. Due to the adoption of IFRS 9 and IFRS 15 as of January 1, 2018, which we did not apply retroactively, financial information as of and for the year ended December 31, 2018 is not comparable with financial information as of and for the years ended December 31, 2014, 2015, 2016 and 2017.

**5A. Operating Results****Overview*****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 sets forth select Brazilian economic indicators for the periods indicated:

	<b>Year ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
GDP growth (contraction) rate	1.1%	1.0%	(3.5)%
Inflation (IPCA) <sup>(1)</sup>	3.7%	3.0%	6.3%
Inflation (IGP-M) <sup>(2)</sup>	7.5%	(0.5)%	7.2%
CDI <sup>(3)</sup>	6.4%	6.9%	14.0%
Appreciation (depreciation) of the <i>real</i> against the U.S. dollar (end of period)	17.1%	1.5%	(4.2)%
Exchange rate at the end of period (US\$1.00)	R\$3.875	R\$3.308	R\$3.259
Average exchange rate (US\$1.00)	R\$3.656	R\$3.193	R\$3.483
Unemployment rate <sup>(4)</sup>	12.3%	12.7%	11.5%

**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 the IBGE.

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

***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 6.3%, 3.0% and 3.7% in 2016, 2017 and 2018, respectively, and 7.2%, (0.5)% and 7.5% 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 as of December 31, 2016, 2017 and 2018 was 14.0%, 9.9% and 6.4%, respectively.

### ***Steel Market***

For the years ended December 31, 2016, 2017 and 2018, our steel segment represented 67%, 70% and 68% of our net revenues, respectively, and 47%, 49% and 44% of our gross profit, respectively. In 2018, 66% of our steel revenues were in Brazil and 34% were abroad. In 2017, 60% of our steel revenues were in Brazil and 40% were abroad, as compared to 60% and 40%, respectively, in 2016.

According to the WSA, global crude steel production totaled 1.8 billion tons in 2018 (4.6% increase over 2017) and 1.67 billion tons in 2017 (5.5% increase over 2016). In 2017, China was 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 IABr, domestic crude steel production was 34.7 million tons in 2018 (1.1% increase over 2017) and 34.3 million tons in 2017 (9.9% decrease over 2016), while rolled steel output totaled 22.4 million tons in 2017 (7.2% increase over 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 Market***

For the years ended December 31, 2016, 2017 and 2018, our mining segment represented, 27%, 25% and 26% of our net revenues, respectively, and 33%, 32% and 35% of our gross profit, respectively. In 2018, 84% of our mining revenues came from exports and 16% from the domestic market, as compared to 82% and 18%, respectively, in 2017, and 88% and 12%, respectively, in 2016. After a sharp increase of 22% in average iron ore prices to US\$71.32/dmt (Platts, Fe 62%) in 2017 from US\$58.45/dmt in 2016, the seaborne iron ore market remained stable, supported by significant investments in infrastructure and construction, healthy margins in steel mill and tight iron ore supply. Iron ore prices registered a minimum level of US\$62.50/dmt in July 2018 and reached an average of US\$69.46/dmt in 2018.

### ***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, 2016, 2017 and 2018, these segments represented an aggregate of 13%, 14% and 12% of our net revenues, respectively, and an aggregate of 13%, 12% and 10% 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.

### **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.



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

We forecast sales trends in both domestic and foreign markets monthly based on data from preceding months. We rely on our own information system to keep up with market developments in order to 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.

	Net Operating Revenues								
	<i>(in millions of R\$)</i>			<i>% of Net Operating Revenues</i>					
	2018	2017	2016	In Market*			Total		
			2018	2017	2016	2018	2017	2016	
<b><u>Domestic Sales</u></b>									
Slabs	-	2	0	0%	0%	0%	0%	0%	0%
Hot-Rolled	2,830	2,133	1,630	28%	28%	24%	18%	17%	15%
Cold-Rolled	1,705	1,269	1,020	17%	17%	15%	11%	10%	9%
Galvanized	3,792	2,466	2,215	37%	32%	33%	25%	19%	20%
Tin Plate	1,349	1,348	1,646	13%	18%	24%	9%	11%	15%
Long Steel	466	426	303	5%	6%	4%	3%	3%	3%
<b>Subtotal</b>	<b>10,143</b>	<b>7,643</b>	<b>6,815</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>66%</b>	<b>60%</b>	<b>61%</b>
<b><u>Sales Abroad</u></b>									
Slabs	3	-	-	0%	0%	0%	0%	0%	0%
Hot-Rolled	422	145	147	8%	3%	3%	3%	1%	1%
Cold-Rolled	169	191	153	3%	4%	3%	1%	2%	1%
Galvanized	1,894	2,662	2,249	36%	53%	51%	12%	21%	20%
Tin Plate	655	523	389	13%	10%	9%	4%	4%	3%
Long Steel	2,051	1,520	1,451	39%	30%	33%	13%	12%	13%
<b>Subtotal</b>	<b>5,195</b>	<b>5,040</b>	<b>4,390</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>34%</b>	<b>40%</b>	<b>39%</b>
<b><u>Total Sales</u></b>									
Slabs	3	2	0						
Hot-Rolled	3,253	2,278	1,777						
Cold-Rolled	1,874	1,460	1,174						
Galvanized	5,687	5,128	4,465						
Tin Plate	2,004	1,871	2,035						
Long Steel	2,518	1,945	1,755						
<b>Total</b>	<b>15,338</b>	<b>12,683</b>	<b>11,205</b>						

\*% 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.

#### 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 2018 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 2018, 2017 and 2016, these costs were R\$880 million, R\$835 million and R\$515 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, 2018, 2017 and 2016 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 and Goodwill***

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 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.

### ***Estimated Losses for Impairment of Accounts Receivable***

In accordance with IFRS 9 – *Financial Instruments*, as of January 1, 2018, we implemented a new model of estimating the expected credit losses of accounts receivable, considering all possible loss events over the life of the receivables. We estimate these expected credit losses according to the loss rate by maturity range adopted by us since the initial recognition date of the account receivable. For the years ended December 31, 2016 and 2017, we did not use the expected losses model to estimate impairment of accounts receivable.

We consider customers' history, default rate, financial condition and the opinion of our legal advisors in estimating expected losses for impairment of accounts receivable.

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For further information on our estimates of expected losses for impairment of accounts receivable, as of January 1, 2018, see note 6 to our audited consolidated financial statements included elsewhere herein.

### ***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***

IFRS 9 “*Financial Instruments*” requires that, as of January 1, 2018, 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.

### ***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 27 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 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.

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:

	<b><u>Nature</u></b>	<b><u>Description</u></b>
	Tax losses	Since a significant portion of our loans and financings are in our parent company, we have incurred tax losses mainly due to high financial expenses.
Temporary differences	Foreign exchange differences	Since 2012, we have opted for taxation on a cash basis. We have operated without a taxable profit, so it would not make sense to use this deductibility on an accrual basis. As a result of the cash basis tax treatment, taxes are only due and expenses are only deductible at the time of debt settlement.
	Losses on Usiminas shares	We recognize the losses on Usiminas shares on an accrual basis, but a taxable event will occur only at the time of divestment.
	Other provisions	We recognize various accounting provisions on an accrual basis, but their taxation occurs only at the time of their realization. This includes

provisions for contingencies, impairment 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).

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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 this context, we follow a business plan to rebalance our financial and operating results, which main measures are:

- expansion of divestment efforts;
- reduction in financial leverage;
- increase in sales volume resulting in improved operating results, higher product sales prices and efficiency in controlling production costs; and
- reprofiling of our indebtedness through negotiations to extend the amortization periods and decentralization of debt by redirecting financing agreements to our subsidiaries according to the nature and application of resources.

With these measures in place, our management expects improved profitability and considers that gradual recognition of tax credits, using an initial projection period of less than 10 years, better reflects the expectation of utilization of the credits recognized in our tax books.

See further details in note 15.b. to our audited consolidated financial statements included elsewhere herein.

#### ***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 *Provisions, 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.”

#### ***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.

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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, 2018, 2017 and 2016, we capitalized borrowing costs amounting to R\$71.6 million, R\$91.9 million and R\$215.8 million, respectively. These costs are basically estimated for our mining projects related mainly to the Casa de Pedra expansion and TECAR.

***Recently Issued Accounting Pronouncements 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, 2018 are described in note 2.z. 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, 2018, 2017 and 2016:

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<b>Income Statement Data:</b>	<b>2018<sup>(1)</sup></b>	<b>Year Ended December 31,</b>		<b>2016<sup>(2)</sup></b>
	<i>(in millions of US\$, except  per share data)</i>	<b>2018</b>	<b>2017<sup>(2)</sup></b>	
		<i>(in millions of R\$, except per share data)</i>		
<b>Net operating revenues</b>	<b>5,927</b>	<b>22,969</b>	<b>18,525</b>	<b>17,149</b>
Cost of products sold	(4,156)	(16,106)	(13,596)	(12,640)
<b>Gross Profit</b>	<b>1,771</b>	<b>6,863</b>	<b>4,929</b>	<b>4,509</b>
<b>Operating expenses</b>				
Selling	(584)	(2,264)	(1,815)	(1,697)
General and Administrative	(127)	(494)	(416)	(518)
Equity in results of affiliated companies	35	136	109	65
Other Expenses	(343)	(1,331)	(647)	(1,077)
Other Income	1,042	4,036	824	663
<b>Total</b>	<b>21</b>	<b>83</b>	<b>(1,945)</b>	<b>(2,564)</b>
<b>Operating income</b>	<b>1,793</b>	<b>6,946</b>	<b>2,984</b>	<b>1,945</b>
<b>Non-operating income (expenses), net</b>				
Financial income	338	1,311	295	644
Financial expenses	(724)	(2,806)	(2,759)	(3,166)
<b>(Loss) income before taxes</b>	<b>1,407</b>	<b>5,451</b>	<b>520</b>	<b>(577)</b>
<b>Income tax</b>				
Current	(213)	(827)	(359)	(206)
Deferred	149	577	(50)	(60)
<b>Net income (loss) from continuing operations</b>	<b>1,342</b>	<b>5,201</b>	<b>111</b>	<b>(843)</b>
<b>Net income (loss) from discontinued operations</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(10)</b>
<b>Net Income (loss) for the period</b>	<b>1,342</b>	<b>5,201</b>	<b>111</b>	<b>(853)</b>
<b>Net income (loss) attributable to noncontrolling interest</b>	<b>33</b>	<b>126</b>	<b>101</b>	<b>82</b>
<b>Net income (loss) attributable to Companhia Siderúrgica Nacional</b>	<b>1,309</b>	<b>5,075</b>	<b>10</b>	<b>(935)</b>
Basic earnings per common share	0.95354	3.69498	0.00757	(0.68876)
Diluted earnings per common share	0.95354	3.69498	0.00757	(0.68876)

(1) Translated solely for the convenience of the reader at the rate of R\$3.875 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2018, as reported by the Central Bank.

(2) Due to the adoption of IFRS 9 and IFRS 15 as of January 1, 2018, which we did not apply retroactively, financial information as of and for the year ended December 31, 2018 is not comparable with financial information as of and for the years ended December 31, 2016 and 2017.

***Year 2018 Compared to Year 2017***

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.

Our consolidated results for the years ended December 31, 2018 and 2017, by business segment are presented below:

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\* 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 EBITDA and Adjusted EBITDA, see note 26 to our audited consolidated financial statements included elsewhere herein.

### *Net Operating Revenues*

Net operating revenues increased R\$4,444 million, or 24%, from R\$18,525 million in 2017 to R\$22,969 million in 2018, mainly due to increased sales volume and prices in the steel and mining markets.

Net domestic revenues increased R\$2,647 or 30%, from R\$8,706 million in 2017 to R\$11,353 million in 2018, while net revenues of exports and sales abroad increased 18%, from R\$9,818 million in 2017 to R\$11,615 million in 2018, driven by higher realized iron ore and steel prices and sales volume.

### *Steel*

Steel net operating revenues increased R\$2,675 million, or 21%, from R\$12,959 million in 2017 to R\$15,634 million in 2018, due to increases in steel prices across the chain throughout the year and, in the domestic market, average steel prices increased 13% as compared to 2017. Sales volume increased 3% from 4.9 million tons in 2017 to 5.1 million tons in 2018. Steel net domestic revenues increased R\$2,510 million, or 32%, from R\$7,819 million in 2017 to R\$10,328 million in 2018.

### *Mining*

Mining net operating revenues increased R\$1,364 million, or 30%, from R\$4,621 million in 2017 to R\$5,985 million in 2018, due to an increase in prices and an increase of 7% in sales volume from 32.5 million tons in 2017 to 34.8 million tons in 2018.

Logistics

In 2018, net operating revenues from railway logistics were R\$1,506 million and net operating revenues from port logistics were R\$266 million, while in 2017, net operating revenues from railway logistics were R\$1,417 million and net operating revenues from port logistics were R\$238 million. Port logistics handled 584,000 tons of steel products, 210,000 tons of general cargo and 247,000 containers.

Energy

Our net operating revenues from the energy segment increased R\$3 million, or 1%, from R\$408 million in 2017 to R\$411 million in 2018, mainly due to increased availability and energy sales in the free market.

Cost of Products Sold

Consolidated cost of products sold increased R\$2,510 million, or 18%, from R\$13,596 million in 2017 to R\$16,106 million in 2018, due to higher raw materials prices, mainly due to the 18.5% appreciation of the U.S. dollar against the *real* in 2018, as well as an increase in volume sold.

Steel

Consolidated steel costs of products sold were R\$12,613 million in 2018, representing a 20% increase as compared to R\$10,538 million in 2017, mainly due to an increase in volume sold and in the price of raw materials and general maintenance.

Steel Production Cost	2018		2017		Variation 2018 Vs 2017	
	R\$ million	R\$/ton	R\$ million	R\$/ton	R\$ million	R\$/ton
<b>Raw Materials</b>	<b>5,414</b>	<b>1,364</b>	<b>4,524</b>	<b>1,072</b>	<b>890</b>	<b>292</b>
Iron Ore	881	222	835	198	46	24
Coal	1,508	380	1,302	308	206	72
Coke	1,291	325	935	221	356	104
Coils	0	0	0	0	0	0
Metals	788	199	690	163	98	36
Outsourced Slabs	30	8	78	18	-48	-10
Pellets	467	118	390	92	77	26
Scrap	225	57	93	22	132	35
Other (1)	223	56	201	48	22	8
<b>Labor</b>	<b>912</b>	<b>230</b>	<b>866</b>	<b>205</b>	<b>46</b>	<b>25</b>
<b>Other Production Costs</b>	<b>2,618</b>	<b>659</b>	<b>2,416</b>	<b>572</b>	<b>202</b>	<b>87</b>
Energy / Fuel	1,179	297	982	233	197	64
Services and Maintenance	638	161	628	149	10	12
Tools and Supplies	354	89	316	75	38	14
Depreciation	390	98	432	102	-42	-4
Other	57	14	58	14	-1	0
<b>Total</b>	<b>8,944</b>	<b>2,253</b>	<b>7,806</b>	<b>1,849</b>	<b>1,138</b>	<b>404</b>

Mining

Our mining costs of products sold increased R\$580 million, or 19%, from R\$3,006 million in 2017 to R\$3,586 million in 2018, mainly due to an increase in sales volume and an increased share of ore bought from third parties.

Logistics

Cost of services attributable to our logistics segment increased R\$57 million, or 5%, from R\$1,182 million in 2017 to R\$1,239 million in 2018, mainly due to adjustments in fuel prices.

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Energy

Cost of products sold attributable to our energy segment remained stable and was R\$287 million in 2018.

*Gross Profit*

Gross profit increased R\$1,935 million, or 39%, from R\$4,928 million in 2017 to R\$6,863 million in 2018, due to an increase of R\$4,444 million in net revenues, which was partially offset by an increase of R\$2,510 million in cost of products sold, as discussed above.

Steel

Gross profit in the steel segment increased R\$599 million, or 25%, from R\$2,421 million in 2017 to R\$3,021 million in 2018, due to the reasons discussed above.

Mining

Our gross profit in the mining segment increased R\$784 million, or 49%, from R\$1,615 million in 2017 to R\$2,399 million in 2018, due to the reasons discussed above.

Logistics

Gross profit in the logistics segment increased R\$60 million, from R\$473 million in 2017 to R\$533 million in 2018, due to the reasons discussed above.

Cement

Gross profit in the cement segment increased R\$70 million, or 272%, from a loss of R\$26 million in 2017 to a gain of R\$44 million in 2018, due to the reasons discussed above.

Energy

Gross profit in the energy segment increased R\$1 million, or 1%, from R\$123 million in 2017 to R\$124 million in 2018, due to the reasons discussed above.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses increased R\$527 million, or 24%, from R\$2,231 million in 2017 to R\$2,758 million in 2018. Selling expenses increased R\$449 million, or 25%, from R\$1,815 million in 2017 to R\$2,264 million in 2018, mainly due to an increase in average freight rates. General and administrative expenses increased R\$78 million, or 19%, from R\$416 million in 2017 to R\$494 million in 2018, due to a change in the allocation of indirect expenses.

*Other Operating Income (Expenses)*

Other operating income (expenses) increased R\$2,528 million from a net operating expense of R\$177 million in 2017 to a net operating income of R\$2,705 million in 2018.

Other operating income increased R\$3,212 million from R\$824 million in 2017 to R\$4,036 million in 2018, mainly due to recognition of tax credits from the PIS and COFINS calculation basis of prior years in the amount of R\$1,102 million, a gain generated from Usiminas' shares measured at fair value through profit or loss in the amount of R\$1,656 million and R\$1,164 million recognized from the sale of Heartland Steel Processing, LLC.

Other operating expenses increased R\$684 million, from R\$647 million in 2017 to R\$1,331 million in 2018, mainly due to the revision of the annual transportation plan with MRS, which we recognized as operating expenses of R\$104 million and cash flow hedge accounting realized in the amount of R\$370 million.

*Equity in Results of Affiliated Companies*

Equity in results of affiliated companies increased R27 million, or 24%, from income of R\$109 million in 2017 to R\$136 million in 2018, mainly due to better results in MRS.

### *Operating Income*

Operating income increased R\$3,963 million, or 133%, from R\$2,984 million in 2017 to R\$6,947 million in 2018, due to the reasons discussed above.

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

Financial income (expenses) generated net financial expenses of R\$1,496 million in 2018, as compared to net financial expenses of R\$2,464 million in 2017, representing a decrease of R\$968 million. This was mainly due to recognition of monetary adjustment applicable on tax credits of PIS and COFINS that had been over-collected since 2001. These overpayments were due to the Brazilian government's calculation methodology for these taxes, which included the state value-added tax embedded in local sales invoices in the basis of taxable revenues. Along with other Brazilian companies, we disputed the inclusion of the state value-added tax in the basis of taxable revenues and, in 2018, we received a final favorable decision. Accordingly, we recognized these tax credits as other operating income and the corresponding monetary correction as financial income.

### *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 is volatile.

At statutory rates, we had a tax expense of R\$1,853 million in 2018 and R\$177 million in 2017, which represents 34% of our income before taxes. After adjustments to meet the effective rates, we recorded an expense for income tax and social contribution of R\$250 million in 2018, as compared to an expense of R\$409 million in 2017. Expressed as a percentage of pretax income, our effective income tax rate was 79% in 2017 and 5% in 2018. For the year ended December 31, 2018, adjustments to meet the effective income tax rate amounted to income of R\$1,603 million, mainly due to recognition of R\$972 million related to deferred income tax and social contribution on temporary differences, a positive impact of R\$836 million related to reversal of tax credits previously recognized, which was partially offset by other minor items that 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 an expense of R\$205 million.

For further information, see note 15.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 and non-taxable factors, including income from offshore operations and tax losses from offshore operations.

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

In 2018, we recorded net income of R\$5,201 million, as compared to R\$111 million in 2017. The increase of R\$5,090 million was due to the reasons discussed above.

### *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:

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\* 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 EBITDA and Adjusted EBITDA, see note 26 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 4.9 million tons in 2016 to 4.9 million 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 2.8 million tons in 2016 to 2.8 million 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% and remained approximately 2.1 million tons in 2016 and 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 Steelworks 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.

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 990,000 tons of steel products, representing a 23% increase as compared to 2016, 9,000 tons of general cargo and 188,000 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.

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### 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.

### 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. We also had a significant impact in other operating expenses in 2016 related to the impairment loss of R\$388 million we recorded from our investment in TLSA. In 2013, we lost control in TLSA when TLSA's shareholders approved its disproportional spin-off, which segregated Railway System I ("RS I") and Railway System II ("RS II"), which had formerly comprised the Northeast Railway System concession.

As a result of the spin-off, RS I assets were merged into FTL, a subsidiary of ours, and RS II assets remained under TLSA. Pursuant to an agreement among TLSA's shareholders executed on the spin-off date, TLSA became a joint venture subject to joint control of CSN and one of the Brazilian government entities comprising a public block. We and the public block carry joint rights in TLSA's material company decisions and ordinary course of business, including budgeting, internal policies, capital expenditures and debt profile. These joint rights effectively confer veto rights over certain material company decisions. This new control structure resulted in our loss of control over TLSA, pursuant to criteria set forth in IFRS 10 – *Consolidated Financial Statements*, and triggered the recognition of the fair value allocated to TLSA in loss of control.

Upon the spin-off, as of December 31, 2013, in accordance with paragraphs 25, B97-B99A, of IFRS 10, we deconsolidated all TLSA assets, liabilities and non-controlling interests, and began recognizing our remaining interest in TLSA as an equity method investment, initially measured at fair value as of the spin-off date pursuant to guidance

in IFRS 13 – *Fair Value Measurement*, and subsequently pursuant to IAS 28 – *Investments in Associates and Joint Ventures*.

TLSA remains a pre-operational entity and its concession period is set to expire at the end of 2057.

Upon the spin-off and loss of control, we determined the fair value of our remaining interest in TLSA in accordance with IFRS 13. We used the income approach technique to determine the fair value of future cash flows from investments in and net revenues generated and expenses incurred by the RS II, considering (i) TLSA's business plan, which includes system capacity volumes for each type of good transported and market prices and conditions; (ii) TLSA's concession agreement's expiration in 2057; (iii) the cap on the rate of return established in TLSA's concession agreement of 6.75% *per annum*, plus inflation, as calculated by the national broad consumer price index, during the life of the concession; and (iv) the concession agreement's early expiration if the rate of return reaches the cap before 2057.

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The impairment loss of R\$388 million recorded as other operating expenses in 2016 represented the write-down of our investment in TLSA and did not represent our proportional amount of any impairment loss recognized by TLSA. The impairment loss was triggered in 2016 due to (i) additional delays in the RS II stemming from delays in the public block's funding as a result of ongoing inspections by governmental agencies (funding would not be granted until completion of the inspections), which delays were not compensated by an extended concession period, and (ii) an increase in the Brazilian long-term interest rate (*Taxa de Juros de Longo Prazo*), or TJLP, from 5.5% in 2015 to 7.5% in 2016, which increased TLSA's cost of financing its loans.

The construction of the RS II has experienced delays, and the commencement of its operations, originally scheduled for 2017, has been repeatedly postponed. In 2016, a two-year delay in the commencement of the RS II's operations without any extension in its concession period meant we had two years less to recover our investment in TLSA than originally calculated.

In spite of the RS II's delays, TLSA concluded that its discounted cash flow model ("DCF") did not present impairment in its long-lived assets, meaning TLSA remained fully recoverable since 2013 and did not record any impairment loss on its long-lived assets. In parallel, we test for impairment in our interest in TLSA annually, considering the guidance in paragraphs 41A and 41C of IAS 28. In 2016, our assessment of potential impairment loss comprised (i) review of TLSA's own evaluation of impairment of its long-lived assets under the DCF model and (ii) CSN's adjustments to the impairment model prepared by TLSA to reflect the dividend distribution model ("DDM"), under which we project expected dividends, pursuant to the profitability set forth in TLSA's DCF model.

We followed the steps described below in our DDM:

1. Review and challenge of TLSA's nominal cash flows under TLSA's DCF model;
2. Our interest in TLSA has been diluted over the years and will be further diluted because the remaining capital contributions scheduled for each shareholder are different until the RS II's completion, and we have the lowest capital contribution remaining; accordingly, our projection of cash inflows from dividends considers our percentage of ownership each year after dilutions, depending on the capital contributions scheduled for each shareholder; and
3. Discounting of estimated cash inflows from dividends to present value considering the cost of equity embedded in TLSA's weighted average cost of capital.

Despite different methodologies, the DCF model and the DDM tend to present similar results, as set forth in paragraph 42 of IAS 28. However, in the case of our interest in TLSA, the two models presented different results in 2016 because, due to the delay in the RS II, the cost of equity used in the DDM to discount dividends to present value was significantly higher than the weighted average cost of capital used in the DCF model. Accordingly, in 2016, the DDM presented a lower present value than the DCF, which reduced the fair value amount that we attributed to our interest in TLSA.

#### *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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*Income Taxes*

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 15.a. to our audited consolidated financial statements included elsewhere herein.

*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.

**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\$1,441 million as of December 31, 2018. 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. For more information, see note 13.b. to our audited consolidated financial statements included elsewhere herein.

**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 2018, 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 2018.

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\$1,164 million in 2018, compared to a decrease of R\$1,460 million in 2017 and a decrease of R\$2,990 million in 2016.

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### ***Operating Activities***

Cash provided by operating activities was R\$2,208 million in 2018 and R\$572 million in 2017. The increase of R\$1,636 million was mainly due to the following events:

- in 2018, our results of operations improved and our consolidated net income was R\$5,201 million, as compared to consolidated net income of R\$111 million in 2017, which represented an increase of R\$5,090 million, mainly due to:
  - R\$2,208 million in tax credits of PIS and COFINS recognized in 2018 as a result of overpayments in prior years, which we challenged in court and for which we received a final favorable decision;
  - R\$1,164 million from the sale of our subsidiary Heartland Steel Processing, LLC in 2018; and
  - R\$1,656 million from accumulated appreciation of our shares in Usiminas, which we recorded in other comprehensive income in net equity and, upon adoption of IFRS 9 as of January 1, 2018, we recorded as income.

Cash provided by operating activities was R\$276 million in 2016, which represented a variation of R\$296 million as compared to cash provided by operating activities in 2017, 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 of monetary and exchange variations, net, mainly due to the fluctuation of the U.S. dollar exchange rate; and
- monetary adjustment related to Eletrobrás compulsory loan of R\$755 million; and
- working capital variation mainly due to inventories from a 40% increase in the production of slab.

### ***Investing Activities***

Cash used in investing activities was R\$98 million in 2018, R\$1,049 million in 2017 and R\$2,305 million in 2016. The decrease of R\$951 million in cash used in investing activities from 2017 to 2018 was mainly due to net cash received from the sale of Heartland Steel Processing, LLC in the amount of R\$1,670 million, which was partially offset by capital expenditures of R\$1,536 million in 2018, as compared to R\$1,059 million in 2017, which represented an increase of R\$477 million, and withdrawals of R\$168 million in financial investments in 2018. 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.

### ***Financing Activities***

Cash used in financing activities was R\$3,257 million in 2018, R\$994 million in 2017 and R\$883 million in 2016. The increase of R\$2,263 million from 2017 to 2018 was mainly due to:

- an increase of R\$3,492 million in debt amortizations to R\$5,020 million in 2018, as compared to R\$1,528 million in 2017, which was partially offset by an increase of R\$1,611 million in new borrowings in 2018, from R\$534 million in 2017 to R\$2,144 million in 2018;
- R\$502 million in dividends paid in 2018;
- R\$213 million in cash from the sale of treasury shares.

### ***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 27 days as of December 31, 2018.

### ***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, was 97 days, 95 days and 99 days as of December 31, 2016, 2017 and 2018, respectively.

### ***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, was 51 days, 62 days and 78 days as of December 31, 2016, 2017 and 2018, respectively. This extension in payment terms reflects our renegotiation of commercial terms with our suppliers and contractors.

### ***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, 2018, cash and cash equivalents were R\$2,248 million, as compared to R\$3,412 million as of December 31, 2017 and R\$4,871 million as of December 31, 2016.

As of December 31, 2018, our short-term and long-term indebtedness accounted for 20% and 80%, 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\$1,229 million in 2018, mainly in:

- R\$579 million in steel: sustaining investments in coke plants at Presidente Vargas Steelworks and its technological modernization projects, as well as maintenance projects in all our steel plants;
- R\$480 million in mining: projects in iron ore beneficiation, increase in iron ore quality, maintenance of tailings dams and sustaining investments in all our mining facilities; and
- R\$72 million in cement: sustaining projects in the Volta Redonda and Arcos plants.

In 2018, we focused and prioritized our investments in implementing sustaining projects to maintain our operational capability and to comply with environmental and safety requirements.

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

- conclusion of the High Intensity Magnetic Separator project in the Casa de Pedra Mine, with capacity to produce 1.3 Mtpy of pellet feed from plant tailings;
- extension of the economic life of coke batteries in the Presidente Vargas Plant; and
- conclusion of the carbochemical cooling water recycling project, reducing effluent discharge and water demand.

Of our total investments in 2017, R\$256 million were for spare parts and R\$601 million were for maintenance investments.

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—Acquisitions and Dispositions.”

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**Debt and Derivative Instruments**

As of December 31, 2018 and 2017, our total debt (composed of current and non-current portions of borrowings and financings) was R\$28,827 million and R\$29,511 million (including transactions costs), respectively, which represents 288% and 356% of shareholders' equity as of December 31, 2018 and 2017, respectively. As of December 31, 2018, our short-term debt (composed of current borrowings and financings, which includes current portion of long-term debt) totaled R\$5,653 million and our long-term debt (composed of non-current borrowings and financings) totaled R\$23,174 million.

As of December 31, 2018, approximately 44% of our debt was denominated in *reais* and substantially all of the remaining balance was denominated in U.S. dollars.

Our policy is to protect ourselves against foreign exchange losses and interest rate losses on our debt, which we do through hedge accounting.

The following table sets forth our borrowings, financing and debentures, which we record at amortized cost:

	<b>Consolidated</b>	
	<b>Current liabilities As of December 31, 2018</b>	<b>Non-current liabilities As of December 31, 2018</b>
<b>Debt agreements in the international market</b>		
<b>Variable interest:</b>		
<b>US\$</b>		
Prepayment	1,016,737	3,830,240
<b>Fixed interest:</b>		
<b>US\$</b>		
Bonds, Perpetual Bonds and ACC Intercompany	2,490,178	8,613,491
<b>EUR</b>		
Others	181,056	106,535
	<b>3,687,971</b>	<b>12,550,266</b>
<b>Debt agreements in Brazil</b>		
<b>Securities with variable interest in:</b>		
<b>R\$</b>		
BNDES/FINAME, Debentures, NCE and CCB	1,890,450	10,710,678
<b>Securities with fixed interest in:</b>		
<b>R\$</b>		
Prepayment	103,376	
	<b>1,993,826</b>	<b>10,710,678</b>
<b>Total borrowings and financing</b>	<b>5,681,797</b>	<b>23,260,944</b>
Transaction costs and issue premiums	(28,358)	(87,309)

<b>Total borrowings and financing + transaction costs</b>	<b>5,653,439</b>	<b>23,173,635</b>
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See further details in note 12 to our audited consolidated financial statements included elsewhere herein.

The following table sets forth the average interest rate of our borrowings and financing:

	<b>Average interest rate<sup>(*)</sup></b>	<b>Consolidated As of December 31, 2018 Total Debt</b>
		<i>(in thousands of R\$)</i>
US\$	5.88%	15,950,646
R\$	8.19%	12,704,504
EUR	3.88%	287,591
		<b>28,942,741</b>

(\*) In order to determine the average interest rates for our borrowings and financing agreements with floating rates, we used rates as of December 31, 2018.

#### *Maturity Profile*

In February 2018 and August 2018, we renegotiated the amortization schedules of our debt with Banco do Brasil and Caixa Econômica Federal, our principal creditors, which debt represented approximately 24% and 25%, respectively, of our aggregate consolidated indebtedness as of December 31, 2017, so as to soften the amortization profiles and extend the maturities of these debts, the duration of which we increased from 26 months to 49 months and from 20 months to 38 months, respectively. As part of these renegotiations, we granted certain collateral, including in the form of pledges over a portion of shares we hold in Usiminas. We have agreed with these creditors to sell the pledged shares by the agreed deadline, and to use the proceeds from these sales for amortization payments under the amended financings.

In February 2018, we issued US\$350 million in aggregate principal amount of 7.625% senior notes due 2023, the proceeds of which we used in cancelling US\$356 million in aggregate principal amount of outstanding 6.875% senior notes due 2019 and 6.50% senior notes due 2020 issued by our subsidiaries CSN Islands XI Corp. and CSN Resources S.A., respectively.

Between April 2018 and October 2018, we had ACCs (Adiantamento sobre Contrato de Câmbio) outstanding in an aggregate principal amount of US\$121.5 million with Banco do Brasil with short-term maturity and in August 2018, we had ACCs outstanding in an aggregate principal amount of US\$33.6 million with Banco Santander with short-term maturity. In addition, in October 2018, we amortized US\$135.6 million of the amount outstanding under a short-term debt with Banco Bradesco.

In November 2018, we renegotiated US\$250 million of our debt with Santander to extend its maturity from 2019 to 2022.

In January 2019, we issued R\$1,950 million in aggregate principal amount of our 10th series of non-convertible debentures with a five year maturity. We used all proceeds from this issuance to pay part of our outstanding debt with Caixa Econômica Federal.

In February 2019, CSN Mineração entered into an export prepayment agreement for the supply of approximately 22 million tons of iron ore over five years with Glencore International AG in an aggregate principal amount of US\$500 million.

In March 2019, we renegotiated our pre-export finance agreement entered into with Caterpillar Financial Services Corporation in an aggregate principal amount of US\$148 million, which is secured by a pledge over certain equipment.

The following chart sets forth our amortization schedule before and after our renegotiations in 2018:

The table below sets forth the maturity profile of our long-term debt as of December 31, 2018, 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.

<b><u>Maturity</u></b> <b><u>in</u></b>	<b><u>Principal</u></b> <b><u>Amount</u></b> <i>(in thousands of R\$)</i>
<b>2020</b>	6,753,338
<b>2021</b>	3,439,268
<b>2022</b>	3,182,553
<b>2023</b>	4,082,376
<b>2024</b>	1,343,735
<b>After 2024</b>	584,874
<b>Perpetual bonds</b>	3,874,800
<b>Total</b>	<b>23,260,944</b>

### **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 2018, we strengthened our commitment to innovative and energy-efficient projects and processes and environmental consciousness through INOVA CSN, our strategic innovation plan. This plan connects us to national and international technological and scientific development. It also led to our development of advanced high strength steel on an industrial scale for the automotive industry.

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

## 5D. Trend Information

### Steel

The WSA estimates that global steel demand, including China, will reach 1.68 billion tons in 2019, which would represent a 1.4% increase as compared to 2018. The IABr estimates that Brazilian steel sales will be 20.0 million tons in 2019, with apparent consumption of 22.4 million tons.

### Mining

After a sharp increase of 22% in average iron ore prices to US\$71.32/dmt (Platts, Fe 62%) in 2017 from US\$58.45/dmt in 2016, the seaborne iron ore market remained stable, supported by significant investments in infrastructure and construction, healthy margins in steel mill and tight iron ore supply. Iron ore prices registered a minimum level of US\$62.50/dmt in July 2018 and reached an average of US\$69.46/dmt in 2018.

Chinese annual iron ore imports remained steady at 1.06 billion tons in 2018, as compared to 1.07 billion tons in 2017, while the global seaborne iron ore market grew in 2018 by 0.9% to 1.49 billion tons. Following the Vale accident at Córrego do Feijão dam in Brumadinho, Minas Gerais, in January 2019, supply disruption continues to press seaborne iron ore prices, which reached an average of US\$87.33/dmt (Platts, Fe62%, N. China) in February 2019.

## 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, 2018

		Aggregate Amount			Maturity	
					<i>(in millions of R\$)</i>	
<b>Guarantees of Debt:</b>						
<b>Transnordestina</b>		2,152			Until 09/19/2056 and indefinite	
Concession	Type of service	2019	2020	2021	After 2021	Total
FTL (Ferrovia Transnordestina Logística)	30-year concession granted on December 31, 1997, renewable for another 30 years, to develop public service and operating the railway system in northeastern Brazil. The northeastern railway system covers	9,396	9,396	9,396	50,895	<b>79,083</b>

	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 make up the Port of Itaguaí, located in Rio de Janeiro. The concession was renewable and the agreement expires in 2047.					
CSN Mineração S.A.	25-year concession started in July 2001. On May 10, 2017, Decree No. 9,048 was approved, which changes the concession extension period for port operations. The requested extension period, added to the initial period, cannot exceed 70 years.	133,021	133,021	133,021	3,458,541	<b>3,857,604</b>
Sepetiba Tecon S.A.		33,779	35,176	36,638	175,053	<b>280,646</b>
		<b>176,196</b>	<b>177,593</b>	<b>179,055</b>	<b>3,684,489</b>	<b>4,217,333</b>

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**“Take-or-Pay” Contractual Obligations**

<b>Payments Period</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>After 2021</b>	<b>Total</b>
Type of service							
Transportation of iron ore, coal, coke, steel products, cement and mining products.	957,373	406,920	1,024,674	962,399	831,166	3,761,232	6,579,471
Supply of power, natural gas, oxygen, nitrogen, argon, iron ore pellets, coal and clinker.	563,743	658,166	453,801	40,780	8,419		503,000
Processing of furnace sludge and slag generated during pig iron and steel production.	8,880	9,467	7,074	7,074	7,074	8,842	30,064
Manufacturing, repair, recovery and production of ingot casting machine units.	52,103	21,533	7,968	3,246	3,246	5,952	20,412
	<b>1,582,099</b>	<b>1,096,086</b>	<b>1,493,517</b>	<b>1,013,499</b>	<b>849,905</b>	<b>3,776,026</b>	<b>7,132,947</b>

**Guarantees of Debt**

We guarantee 100% of the loans granted by BNDES and Banco do Nordeste/FNE to TLSA and 50.97% of the debentures held by FDNE and issued by TLSA. The aggregate principal amount of debt outstanding under the debentures guaranteed by us as of December 31, 2018 was R\$2,152 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 (Ferrovia Transnordestina Logística)***

As of December 31, 2018, 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

***CSN Mineração S.A.***

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 and exports of iron ore occur through this terminal. Under the terms of the concession, we must unload at least 3.0 million tons of coal and coke annually and, as of 2020, we must ship 38.4 million tons of iron ore annually.

As of December 31, 2018, R\$3,858 million was outstanding over the remaining 29 years of the concession.

***Sepetiba Tecon S.A.***

We indirectly own 100% of TECON, which has a concession to operate the container terminal at Itaguaí Port for a 25-year term expiring in 2026, renewable for another 25 years. As of December 31, 2018, approximately R\$281 million of the cost of the concession was outstanding and payable over the remaining eight years of the concession. For more information, see “Item 4D. Property, Plant and Equipment—Acquisitions and Dispositions.”

**Transportation of Iron Ore, Coal, Coke, Steel Products, Cement and Mining Products**

***MRS Logística S.A.***

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

In 2018, the volume set for iron ore and pellets was 6.4 mkt and the volume set for coal, coke and other smelter products was 3.0 mkt with a guarantee of payment of at least 85% of forecast annual revenue.

*Transportation of Iron Ore for Export from Itaguaí*

In 2018, the volume set for iron ore was 32.2 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 2018, 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 2018, the volume set was 633.6 Kt, with a guarantee of payment of at least 80%.

***Ferrovias Centro Atlântica***

*Transportation of Limestone*

This agreement covers transportation of limestone from the city of Arcos to the city of Volta Redonda. In 2018, 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 2018, the volume 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. In 2017, we used 513,140 tons of oxygen to produce 3.0 million tons of crude steel. 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, 2018:

**Payment due by period**  
(in millions of R\$)

<b><u>Contractual Obligations</u></b>	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 years</b>
Long-term accrued finance charges <sup>(1)</sup>	13,041	1,775	2,379	1,283	7,604
Taxes payable in installments	94	20	18	18	38
Long-term debt <sup>(2)</sup>	23,174	0	10,147	7,235	5,792
“Take-or-pay” contracts	7,133	1,494	1,864	1,676	2,099
Derivatives swap agreements <sup>(3)</sup>	0	0	0	0	0
Concession agreements <sup>(4)</sup>	4,217	176	357	362	3,322
<b><u>Purchase Obligations</u></b>					
Raw materials <sup>(5)</sup>	2,988	2,981	8	0	0
Maintenance <sup>(6)</sup>	521	305	216	440	0
Utilities/Fuel <sup>(7)</sup>	2,600	2,240	340	16	5
Total	6,109	5,525	563	16	5

(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) We had no derivative swap agreement as of December 31, 2018.

(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 four 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:

<b>Name</b>	<b>Position</b>	<b>Age<sup>(1)</sup></b>	<b>First Elected on</b>	<b>Last Elected on</b>
<i>Board of Directors</i>				
<b>Benjamin Steinbruch</b>	Chairman	65	April 23, 1993	July 3, 2017
<b>Fabiam Franklin</b>	Member	51	April 28, 2016	July 3, 2017
<b>Yoshiaki Nakano</b>	Member	74	April 29, 2004	July 3, 2017
<b>Antonio Bernardo Vieira Maia</b>	Member	59	April 30, 2013	July 3, 2017
<b>Léo Steinbruch</b>	Member	50	April 28, 2015	July 3, 2017
<i>Board of Executive Officers</i>				
<b>Benjamin Steinbruch</b>	Chief Executive Officer	65	April 30, 2002	September 29, 2017
<b>David Moise Salama</b>	Executive Officer	52	August 2, 2011	September 29, 2017
<b>Luis Fernando Barbosa Martinez</b>	Executive Officer	55	August 2, 2011	September 29, 2017
<b>Pedro Gutemberg Quariguasi Netto</b>	Executive Officer	53	May 11, 2016	September 29, 2017
<b>Marcelo Cunha Ribeiro</b>	Chief Financial and Investor Relations Officer	41	29 September, 2017	September 29, 2017

(1) Age as of the date of this annual report.



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, member of the Interinstitutional Advisory Board of the Superior Court of the state of São Paulo, chairman of the board of directors of CSN Mineração (controlled by us), and chairman of the deliberative council of the CSN Foundation. Currently he also holds the position of chairman of the board of directors of Textíliá S.A., or Textíliá, Fibra Cia. Securitizadora de Créditos Imobiliários, Elizabeth S.A. – Indústria Têxtil, Vicunha Steel S.A., or Vicunha Steel, and Banco Fibra S.A., or Banco Fibra, vice chairman of the board of directors of Vicunha Aços S.A., or Vicunha Aços; member of the board of directors of, Vicunha Participações S.A. and, Officer of Rio Purus Participações S.A., Rio Iaco Participações S.A., or Rio Iaco Participações, and BS Holdings S.A. Administrator of Fazenda Alvorada de Bragança Agro-Pastoril Ltda., Ibis Agrária Ltda., or Ibis Agrária, and Ibis Participações e Serviços Ltda., or Ibis Participações e Serviços (all these companies belong to our controlling group). Over the past five years, he also served as First Vice-President of the Federation of Industries of the state of São Paulo (*Federação das Indústrias do Estado de São Paulo*), or FIESP, since September 2004, member of FIESP's Superior Strategic Board, advisor to the Robert Simonsen Institute, chairman of the board of directors of Nacional Minérios S.A., or Nacional Minérios, Companhia Metalúrgica Prada, TLSA and FTL and as administrator of Haras Phillipson Ltda. (dissolved in November 2017). 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.

*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 TLSA (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 – 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 Getúlio 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 TLSA (company joint controlled by us) and of FTL 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 Getúlio Vargas.

*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 and Textília. He is an executive officer at CFL Participações S.A., or CFL Participações, 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 (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 officers.

*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 ERSA, Minérios Nacional and Companhia Florestal do Brasil and is a member of the board of directors of CSN Mineração, TECON, ITASA, 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, Birman 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 (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 TLSA. He is also currently serving as an Officer of ERSA, Minérios Nacional, CSN Energia, S.A. and SWT, 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 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. Quariguasi 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. There are no other family relationships among any of the members of our management.

### **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. Subject to the terms of the indemnity agreements entered into by us and our directors and officers, we may indemnify, or maintain 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, 2018, 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\$32.9 million, which includes salaries, bonuses, profit sharing arrangements and benefits, such as medical assistance, pension plan contributions and life insurance, among others. For the year ended December 31, 2018, the aggregate compensation paid by us to all members of our fiscal committee for services was R\$0.7 million.

See "Item 6D. Employees" for a brief description of our profit sharing arrangements.

### **6C. Board Practices**

#### **Fiscal 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. As of the date of this annual report, we have a fiscal committee in place, which was elected by our annual shareholders' meeting in June 2018 with a term until our next annual shareholders' meeting. Our fiscal committee comprises three effective members and three alternate members, of which one effective member and the respective alternate were appointed by our minority shareholders.

The members of our fiscal committee as of the date of this annual report are:

<b>Name</b>	<b>Position</b>	<b>Age<sup>(1)</sup></b>	<b>First Elected on</b>
Tufi Daher Filho	Chairman	59	June 29, 2018
Susana Hanna Stiphan Jabra	Member	61	June 29, 2018
André Coji	Member	65	June 29, 2018

(1) Age as of the date of this annual report.

Following is a brief biography of the members of our fiscal committee.

*Tufi Daher Filho.* Mr. Daher owns TDF Consultoria Empresarial Ltda., is partner of Empreendimentos e Construtora Ltda. and owner of the Loungerie, Osklen and Richards franchises in Urberlândia, Minas Gerais. For the last five years, Mr. Daher was member of the board of directors of CPTM – *Companhia Paulista de Trens Metropolitanos* (until January 2019), technical advisor of Hidrovias do Brasil S.A. (until 2018), officer of Metalic, president of the board of directors and chief executive officer of MRS and chief executive officer of TLSA. He was also a director of the National Association of Railroad Companies (*Associação Nacional dos Transportadores Ferroviários* – ANTF). Mr. Daher graduated in civil engineering from Universidade Católica de Minas Gerais. He has participated in a vocational course taught by the Japan International Cooperation Agency related to transportation planning. Mr. Daher also holds a master’s degree in business administration from Fundação Dom Cabral and has participated in an advanced management program in partnership with INSEAD in France.

*Susana Hanna Stiphan Jabra.* Mrs. Jabra is a member of the board of directors and coordinator of the audit committee of CETESB – *Companhia Ambiental do Estado de São Paulo*, member of the board of directors of Furnas – Centrais Elétricas S.A. and alternate member of the fiscal committees of BRF S.A. and Petrobrás. In the last five years, she has also been a member of the board of directors of CSU Cardsystem S.A., member of the fiscal committees of Kepler-Weber S.A., JSL S.A., Paranapanema S.A., CSU Cardsystem S.A. and BRF S.A., as well as alternate member of Movida S.A. and BRF S.A. She served on the advisory committee to the board of directors and was a member of the audit committee of BRF S.A. In addition, since 2014, Mrs. Jabra is a member of the board of directors’ committee of the Brazilian Institute of Corporate Governance (IBGC), since 2015, she is a member of the review commission of the IBGC’s code of best practices on corporate governance and a member of the evaluation committee of the 2014 and 2016 Abrasca Award for best annual report. She is also a mentor of the “Diversity on Boards” group of the IBGC in partnership with the International Finance Corporation (IFC) and the Women Corporate Directors (WCD). She is an instructor of the IBGC on modules of best practices of the board of directors and program for fiscal and audit committee members. Mrs. Jabra is certified by the IBGC to act as member of boards of directors and fiscal committees. She holds a graduate degree in business administration from Faculdade de Economia e Administração da Universidade de São Paulo, specialized in Financial Business (MBA) from Insper, and a certificated mediator of the board of directors from Escola de Direito de São Paulo da Fundação Getúlio Vargas (GVLaw).

*André Coji.* Mr. Coji works with structured financial operations for renowned companies in the Brazilian real estate market. For the last five years, he was treasury director for a non-profit organization, Unibes, and a member of the advisory board of several Brazilian families, responsible for asset management, fiscal planning, tax and succession planning. Mr Coji graduated in business administration from Fundação Getúlio Vargas (FGV) and in law from Universidade de São Paulo. He has also a board of directors certificate from the IBGC.

#### **Audit Committee**

In June 2005, we appointed an audit committee (*comité de auditoria*), 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.

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Our audit committee comprises Mr. Yoshiaki Nakano and Mr. Antonio Bernardo Vieira Maia and we are looking to appoint a third member at our board of directors' meeting following our next shareholders' meeting. Our audit committee may also be assisted by an external consultant, whenever necessary. 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 to participate in our employee pension plan after ceasing to be a director.

### **6D. Employees**

As of December 31, 2016, 2017 and 2018, we had 23,993 and 25,189 and 24,857 employees, respectively. As of December 31, 2018, approximately 4,300 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 34 members, the Accountants' Union with one member and the Workers' Unions from Arcos, Camaçari, Recife and Araucária, with a total of 47 members. At all other companies controlled by CSN, including ERSÁ, CSN Mineração, FTL and TLSA, we have a total of 1,073 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 27 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, holds an indirect majority ownership interest in Vicunha Aços and Rio Iaco Participações, our controlling shareholders.

Our executive officers and the members of our board of directors directly held an aggregate of 1,502 shares of our outstanding common shares as of December 31, 2018. The members of our fiscal committee did not hold any of our outstanding common shares.

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

### **7A. Major Shareholders**

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As of December 31, 2018, 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, 2018, the number of our common shares owned by our major shareholders:

<b>Name of Person or Group</b>	<b>Common Shares</b>	
	<b>Shares Owned</b>	<b>Percent of Outstanding Shares</b>
<b>Vicunha Aços S.A.<sup>(1)</sup></b>	682,855,454	48.97%
<b>Rio Iaco Participações S.A.<sup>(2)</sup></b>	58,193,503	4.19%

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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.

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

Our major shareholders do not have different voting rights from our other shareholders.

For more information, see “Item 3D. Risk Factors—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.”

## **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 19 to our audited consolidated financial statements included elsewhere herein.

i. Vicunha Aços and Rio Iaco Participações are holding companies and, as of December 31, 2018, they held 48.97% and 4.19% of our common shares, 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 19 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, Ibis Participações e Serviços, Partifib Projetos Imobiliários Ltda., Vicunha Imóveis Ltda. and Vicunha Serviços Ltda.

## **7C. Interests of Experts and Counsel**

Not applicable.

## **Item 8. Financial Information**

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

See “Item 3A. 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 administrative, judicial and arbitration proceedings, 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, 2018, we and our subsidiaries were defendants in 7,665 labor claims, for which we recorded a provision of R\$362.1 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, health plan, 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 2018 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.

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### ***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, 2018, we had recorded a provision of R\$210.2 million for these civil contingencies.

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, 2018, the amount relating to probable losses for civil contingencies relating to environmental issues was R\$31.4 million.

### ***Tax Contingencies***

Our main tax contingency relates to a tax assessment notice involving R\$11.8 billion (as of December 31, 2018) issued against us for an alleged failure to submit to taxation a 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 was upheld by the second level administrative court – the Administrative Board of Tax Appeals (*Conselho Administrativo de Recursos Fiscais*), or CARF. There remains a pending issue under review by the Superior Chamber of CARF regarding the qualified penalty. We have challenged the merits of the tax assessment at the judicial level before and obtained an injunction against any immediate assessment. In April 2018, a federal court of tax enforcement set aside a portion of our assets, including buildings, equipment, land, vehicles and fixtures and furniture, as collateral for our potential liability under this proceeding. As a result, in August 2018, a federal court of tax enforcement blocked our distribution of an extraordinary dividend in the amount of R\$890.0 million, which ruling was reversed in December 2018. Our assessment remains that our risk of loss is possible.

This same tax assessment notice resulted in another contingency issued against Namisa (merged into our subsidiary CSN Mineração as of December 31, 2015) involving R\$2.7 billion, as of December 31, 2018. This tax assessment is for income tax and social contribution not paid due to allegedly improper goodwill amortization from 2008 to 2011. In May 2013, the São Paulo regional judgment office issued a decision favorable to us and cancelled the tax assessment notice, which decision 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 challenged the formal requirements of the Federal Prosecutor's Office appeal at the judicial level and obtained an injunction against any immediate assessment. In December 2018, another contingency related to allegedly improper goodwill amortization from 2013 to 2014 was issued against Namisa. This tax assessment demands the payment of income tax and social contribution involving approximately R\$1.0 billion. We filed our defense and are waiting for the first administrative decision.

In addition, we received tax assessment notices in December 2015 and December 2016 for R\$1.3 billion and R\$806 million as of December 31, 2018, 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 for a final administrative decision.

### ***Antitrust***

In October 1999, we received a fine from CADE claiming that certain practices adopted by us and other Brazilian steel companies before 1997 allegedly comprised a cartel. We challenged the cartel allegation and the imposition of

the fine judicially and, in 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 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. In April 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 would continue suspended until we reach the thresholds established in the TCD.

In March 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, which request CADE granted and following which, at Usiminas' annual general shareholders' meeting in April 2016, we appointed two independent directors and one independent member of Usiminas' fiscal committee, as well as their respective alternates. The 2016 appointments are under litigation and, although 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. CADE denied our request for exception in April 2018. On March 20, 2019, CADE approved an amendment to the TCD, in order to establish a new timeframe for us to reduce our equity stake in Usiminas. The new timeframe and reduction percentages remain confidential.

### ***Northeastern Railway System Proceedings***

The 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 state-owned railway company Valec and 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. There has been no decision rendered on the merits of this proceeding and an unfavorable decision may result in the same adverse consequences.

### ***Environmental Proceedings***

#### ***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 (TAC 26/2010). TAC 026/2010 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 this TAC to, among others, include new obligations imposed by INEA, resulting in an additional investment of R\$165 million, which we made. Due to the final deadline of TAC 026/2010, 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 (TAC 03/2016). During the validity of TAC 03/2016, the power plant at Presidente Vargas Steelworks has an environmental authorization to operate (*Autorização Ambiental de Funcionamento*), or AAF.



Prior to the end of the AAF, we obtained an environmental authorization (*Autorização Ambiental*), which provisionally maintained the full operation of Presidente Vargas Steelworks until September 20, 2018.

During this period, we held discussions with environmental authorities of the state of Rio de Janeiro to reach a consensual solution to the environmental issues, and in September 2018, we signed a new TAC (TAC 07/2018) with the state of Rio de Janeiro through the Secretary of State for the Environment and Sustainability (*Secretaria de Estado do Ambiente e Sustentabilidade – SEAS*), INEA and the State Environmental Control Commission (*Comissão Estadual de Controle Ambiental – CECA*), thereby maintaining the full operation of Presidente Vargas Steelworks. In parallel, INEA issued an AAF valid until October 2024, which authorizes the regular operations of Presidente Vargas Steelworks during its compliance with TAC 07/2018.

This new TAC 07/2018 contemplates investments of approximately R\$303 million in environmental projects and actions in the region until August 2024 and represents our commitment to the sustainability of our activities and to the communities of Volta Redonda and the surrounding region.

#### *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, 2018, it is pending judgment on jurisdictional conflict as between state court or federal court. 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. In the first lawsuit, Vazamento ETE, after the course of the appeal, the case was referred to ground court for filing. 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, the deadline to comply with the emissions standards was December 2018, however, TAC 07/2018 established new deadlines, which we expect the court will accept.

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.

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In July 2018, the Federal Prosecutor's Office and the State Public Prosecutor of Rio de Janeiro filed a public civil action against us, HARSCO and INEA, for immediate removal of slag piles in the city of Volta Redonda, in the state of Rio de Janeiro, that adjoin the Paraíba do Sul River. Relief sought includes cleaning of the entire effluent collection chute, presentation of the volume of slag stored in the area, presentation of a project to control atmospheric emissions of slag piles and partial embargo of the activity, material damages and collective moral damages.

A preliminary injunction was granted to require us, HARSCO and INEA to immediately limit the amount of slag received monthly, as well as the height of the piles at four meters. This preliminary injunction was appealed and is pending final judgment. We consider there is a remote chance of appellate review by the state court. Any non-compliance with the preliminary injunction as of March 28, 2019 may result in fines of approximately US\$600,000 per month. In parallel, we filed a petition requesting a preliminary hearing for an action plan to comply with this injunction. In lower court, the case is in its earlier phase.

#### *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. In December 2018, we signed a new agreement with the Municipality of Volta Redonda to end the legal dispute through reciprocal concessions, which, as of the date of this annual report, is awaiting court approval.

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 Patrimônio 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. Declaration of compliance with one item of the TAC is pending for its closure.

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. In June 2018, we settled a judicial agreement 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 authorities proving the stability and security of Dique do Engenho and expect that this action will also be dismissed.

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In February 2018, the Public Prosecutor's Office of the state of Minas Gerais filed a public civil action to compel our mining entity (Minérios Nacional) to take security measures at the Fernandinho dam complex. In March 2018, the injunction was partially granted to determine the adoption of security and control measures. We complied with the injunction and filed a counterclaim. The Public Prosecutor's Office of the state of Minas Gerais is expected to file another counterclaim. In December 2018, FEAM and the state of Minas Gerais filed a public civil action pleading an injunction for us to present an emergency plan in relation to the Fernandinho dam complex and evidence of adoption of preventive structural measures, as well as definitive implementation of an emergency plan and a monthly security audit report.

In May 2017, CSN Mineração signed a TAC with SEMAD, aiming to promote environmental adaptations in its mining treatment unit. This TAC has been complied with and the respective environmental license duly issued.

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. This TAC has been complied with and the respective environmental license duly issued.

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. We fulfilled the commitments listed in the agreement.

### ***Other Legal Proceedings***

We are defendants in other administrative and judicial proceedings involving claims in the aggregate amount of R\$31,612 million as of December 31, 2018 (as compared to R\$30,639 million as of December 31, 2017), of which (i) R\$28,832 million relate to tax contingencies as of December 31, 2018 (R\$27,457 million as of December 31, 2017), (ii) R\$1,024 million relate to civil contingencies as of December 31, 2018 (R\$1,210 million as of December 31, 2017), (iii) R\$1,537 million relate to labor contingencies and social security contingencies as of December 31, 2018 (R\$1,570 million as of December 31, 2017) and (iv) R\$220 million relate to environmental contingencies as of December 31, 2018 (R\$402.4 million as of December 31, 2017). Our legal counsel has assessed these contingencies as entailing a risk of possible loss and, therefore, no provision has been recorded for these contingencies.

### ***Independent Investigation***

Following media reports about statements made as part of a plea bargain testimony in a criminal proceeding not involving us that irregular election funding of R\$16.5 million was 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 independent 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 Public Prosecutor's Office opened an investigation into our chairman and chief executive officer regarding the same allegations. In February 2018, Brazil's Supreme Court ruled that, because the case relates to alleged violations of an electoral nature, it did not belong in federal court. As a result, the Supreme Court ordered the withdrawal of the case from federal court and referred it to electoral court. We have not been the subject of any investigation by any governmental or enforcement agencies with respect to these allegations.

Additionally, since the case's referral to electoral court, no evidence or testimony has been requested to date and no new documents have been filed. 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.

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## 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 Dividend" 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.

*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.

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*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 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.

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### ***Payment of Dividends***

We are required to hold annual shareholders' meetings within the first four months after the end of our fiscal year at which an annual dividend may be declared. Additionally, our board of directors may declare interim dividends. Under Brazilian Corporate Law, dividends are generally required to be paid to the holder of record on a dividend declaration date within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or interest on shareholders' equity as described under "—Additional Payments on Shareholders' Equity" below) in respect of its shares, after which we will no longer be liable for the dividend payments.

Our payments of cash distributions on common shares underlying the ADSs will be made in Brazilian currency to our ADR custodian on behalf of our ADR depository. Our ADR custodian will then convert the proceeds into U.S. dollars and will cause the U.S. dollars to be delivered to our ADR depository for distribution to holders of ADSs.

In August 2018, a federal court of tax enforcement blocked our distribution of an extraordinary dividend in the amount of R\$890.0 million due to ongoing tax proceedings we are party to, which ruling was reversed in December 2018.

### ***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 2018 was 6.98%.

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. Our common shares are traded on the B3 under the symbol "CSNA3." The ADSs, which are issued under a deposit agreement with JPMorgan Bank, N.A., as depository, and substantially all of which are held of record by the Depository Trust Company, are traded on the NYSE under the symbol "SID." There were no significant trading suspensions of our common shares or the ADSs in the last three years.

**9B. Plan of Distribution**

Not applicable.

**9C. Regulation of Securities Markets**

**Trading on the B3 and NYSE**

The B3 is the only Brazilian stock exchange on which private equity and private debt may be traded..

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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. 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. The B3 equities clearing is responsible for the registration, settlement and risk management of trades with shares through the PUMA Trading System.

In order to better control volatility, the B3 has adopted a “circuit breaker” mechanism pursuant to which trading sessions may be suspended for a period of 30 minutes or one hour whenever the index of the stock exchange falls 10% or 15%, respectively, compared to the previous day’s closing index. If the market falls more than 20% compared to the previous day, the B3 may determine the suspension of trading in all markets for a defined period, at its sole discretion, and such decision must be disclosed to the market through the News Agency (*ABO – Operações*). The “circuit breaker” is not allowed to be started during the last 30 minutes of the trading session.

The B3 is significantly less liquid than the NYSE or other major exchanges in the world. As of December 31, 2018, the aggregate market capitalization of the B3 was equivalent to R\$62.6 trillion and the 10 largest companies listed on the B3 represented approximately 60.6% of the total market capitalization of all listed companies. In contrast, as of December 31, 2018, the aggregate market capitalization of the NYSE was US\$24.5 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 3D. Risk Factors—Risks Relating to Our Common Shares and ADSs—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, 2018, we accounted for approximately 40.6% 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. 6,385 dated December 7, 1976, as amended and supplemented, or the Brazilian Securities Law, 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 be registered as a publicly held company with the CVM and apply for registration with the B3.

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*) and a governance report (*Informe de Governança*). 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. Through the governance report we disclose information regarding governance practices set forth in the Brazilian Code of Corporate Governance, by the method of "practice or explain." Each of our reference form and governance report are available on our investor relations website ([www.ri.csn.com.br](http://www.ri.csn.com.br)) or on the CVM's website (<http://www.cvm.gov.br>).

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 shareholder oversight of companies.

**9D. Selling Shareholders**

Not applicable.

**9E. Dilution**

Not applicable.

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## **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, 2018, 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.

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In order to participate in a shareholders' meeting, a shareholder must be a record owner of the share on the day the meeting is held, and may be represented by a proxy.

Shareholders' meetings are called, convened and presided over by the chairman of our board of directors or, in his absence, by whom he appoints. Brazilian Corporate Law requires that our shareholders' meeting be convened by publication of a notice in the *Diário Oficial do Estado de São Paulo*, the official government publication of the state of São Paulo, and in a newspaper of general circulation in Brazil and in the city in which our principal place of business is located, currently the *Jornal Folha de São Paulo – Edição Regional*, at least 15 days prior to the scheduled meeting date and no fewer than three times (in accordance with CVM Instruction No. 599/2015, our shareholders' 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).

***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 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.

### **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 depository are able to convert dividends and other distributions with respect to the common shares represented by ADSs into foreign currency and remit the proceeds outside Brazil. Pursuant to CMN Resolution No. 4,373, in order for an investor to surrender ADSs for the purpose of withdrawing the shares represented thereby, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank and the CVM to act as its legal representative, who shall be responsible, among other things, for keeping and updating the investors' certificates of registrations with the Central Bank, which entitles registered foreign investors to trade the underlying shares directly on the B3.

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A non-Brazilian holder of common shares may experience delays in obtaining a certificate of registration, which may delay remittances abroad. This kind of delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder.

Under current Brazilian legislation, the Brazilian government may impose temporary restrictions on remittances of foreign capital abroad in the event of a serious imbalance or an anticipated serious imbalance of Brazil's balance of payments. See "Item 3D. Risk Factors—Risks Relating to our Common Shares and ADSs— If you surrender ADSs and withdraw common shares, you risk forfeiting Brazilian tax advantages and losing the ability to timely remit foreign currency abroad."

## **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 the ADS depository and the assumption that each obligation in our deposit agreement and any related agreement will be performed in accordance with its terms.

Although there is, at present, no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may result in such a treaty. Both countries have been accepting the offset of income taxes paid in one country against the income tax due in the other based on reciprocity. No assurance can be given, however, as to whether or when an income tax treaty will enter into force or how it will affect the U.S. Holders, as defined below, of our common shares or ADSs. 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 the ADS depository in respect of the common shares underlying the ADSs or (ii) to a Non-Resident Holder in respect of common shares, are currently not subject to Brazilian withholding income tax, as far as such amounts are related to profits generated on or after January 1, 1996. Dividends relating to profits generated prior to January 1, 1996 may be subject to Brazilian withholding income tax at varying rates, depending on the year such profits have been generated, but CSN does not have any profits generated prior to January 1, 1996.

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As of January 1, 2008, Brazil adopted new GAAP, following IFRS standards. Brazilian income taxes were then calculated under a temporary regime called Transitional Tax Regime (RTT, in the Portuguese acronym) meant 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 2014, 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 TJLP, as determined by the Central Bank from time to time, multiplied by the sum of determined net equity accounts 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 (i) that does not impose income tax, (ii) where the income tax rate is lower than 20% or (iii) where the local legislation imposes restrictions on disclosing the shareholding composition or ownership of the investment (“Tax Haven Jurisdiction”). Ordinance No. 488, dated November 28, 2014, reduced to 17% the maximum income tax rate that may be imposed by a given jurisdiction for characterization of a Tax Haven Jurisdiction, as long as the jurisdiction complies with international tax transparency standards. Subsequently, tax authorities provided that compliance with such standards requires: (a) signature of or conclusion of negotiation to sign a treaty or agreement allowing the exchange of information related to identification of income beneficiaries, corporate structure, ownership of goods or rights or economic transactions and (b) commitment to the criteria defined in international anti-tax evasion forums of which Brazil is a member. Tax authorities regularly issue a list of jurisdictions which are considered Tax Haven Jurisdictions. This list is currently set forth in Normative Instruction No. 1,037/10, as amended.

These payments of interest on shareholders' equity may be included as part of any mandatory dividend. To the extent payment of interest on shareholders' equity is included, the company may be required to distribute to shareholders an additional amount to ensure that the net amount received by them, after payment of the applicable withholding income tax, *plus* the amount of declared dividends, is at least equal to the 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; and
- in all other cases, subject to income tax at a rate of up to 25%.

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As a general rule, capital gains realized as a result of a disposition transaction are the positive difference between the amount realized on the disposition of the common shares and the respective acquisition cost.

According to Law No. 10,833/03, the gains recognized on a disposition of assets located in Brazil, such as our common shares, by a Non-Resident Holder, are subject to withholding income tax in Brazil. This rule is applicable regardless of whether the disposition is conducted in Brazil or abroad and/or if the disposition is or is not made to an individual or entity resident or domiciled in Brazil.

A withholding income tax of 0.005% will apply and can be offset against any income tax due on the capital gain. Such withholding does not apply to a 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 two consecutive fiscal years (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.

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

<b>Capital Gains Tax Rate</b>	<b>Threshold (total gains on the sale of the same rights within two fiscal years)</b>
<b>15%</b>	Total gains below R\$5 million
<b>17.5%</b>	Total gains above R\$5 million, but below R\$10 million
<b>20%</b>	Total gains above R\$10 million, but below R\$30 million
<b>22.5%</b>	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.

The statutory definition of a Tax Haven Jurisdiction for the purpose of income taxation on gains should differ depending on whether or not a holder is a 4,373 Holder. In the case of a 4,373 Holder, the definition of Tax Haven Jurisdiction should not comprise jurisdictions where the local legislation imposes restrictions on disclosing the shareholding composition or ownership of the investment. However, the list provided for in Normative Instruction No. 1,037/10 does not seem to differ from the Tax Haven Jurisdiction definition for the purposes of 4,373 Holders.

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 rates of up to 25%.

***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, regardless if the purchaser is a Brazilian resident or not. 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 Brazilian withholding tax. However, due to the lack of any administrative or judicial guidance, there is no assurance that this interpretation would prevail. If the ADSs are deemed to be assets located in Brazil, gains recognized by a Non-Brazilian Holder from the sale or other disposition to either a non-resident or a resident in Brazil may be subject to income tax in Brazil according to the rules described in “—Taxation of Gains” above.

### ***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 rates up to 25%. In some circumstances, there may be arguments that this tax treatment is not applicable in the case of 4,373 Holders that are not located 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

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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 the ADS depository, 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.

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Dividend income with respect to the ADSs will be qualified dividend income, provided that, in the year that a non-corporate U.S. Holder receives the dividend, the ADSs are readily tradable on an established securities market in the United States, and we were not in the year prior to the year in which the dividend was paid, and are not in the year in which the dividend is paid, a PFIC. Based on existing IRS guidance, it is not entirely clear whether dividends received with respect to the common shares not held through ADSs will be treated as qualified dividend income, because the common shares are not themselves listed on a U.S. exchange.

The amount of the dividend distribution includible in gross income of a U.S. Holder will be the U.S. dollar value of the *real* payments made, determined at the spot *real*/U.S. dollar rate on the date such dividend distribution is includible in the gross income of the U.S. Holder, regardless of whether the payment is in fact converted into U.S. dollars. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in gross income to the date such payment is converted into U.S. dollars will be treated as ordinary income or loss from sources within the United States and will not be eligible for the special tax rate applicable to qualified dividend income.

Dividends received by most U.S. holders will constitute foreign source “passive income” for foreign tax credit purposes. Subject to limitations under U.S. federal income tax law concerning credits or deductions for foreign income taxes and certain exceptions for short-term and hedged positions, any Brazilian income tax withheld from dividends paid by us would be treated as a foreign income tax eligible for credit against a U.S. Holder’s U.S. federal income tax liability (or at a U.S. Holder’s election, may be deducted in computing taxable income if the U.S. Holder has elected to deduct all foreign income taxes paid or accrued for the relevant taxable year). The rules with respect to foreign tax credits are complex and U.S. Holders are urged to consult their own tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

The U.S. Treasury Department has expressed concern that intermediaries in connection with depositary arrangements may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. persons who are holders of depositary shares. Accordingly, investors should be aware that the discussion above regarding the availability of foreign tax credits for Brazilian income tax withheld from dividends paid with respect to common shares represented by ADSs could be affected by future action taken by the U.S. Treasury Department.

Distributions of additional common shares to U.S. Holders with respect to their common shares or ADSs that are made as part of a pro rata distribution to all our Shareholders generally will not be subject to U.S. federal income tax.

### ***Non-U.S. Holders***

Dividends paid to a Non-U.S. Holder in respect of common shares or ADSs will not be subject to U.S. federal income tax unless those dividends are effectively connected with the conduct of a trade or business within the United States by the Non-U.S. Holder (or are attributable to a permanent establishment maintained in the United States by the Non-U.S. Holder, if an applicable income tax treaty so requires as a condition for the Non-U.S. Holder to be subject to U.S. taxation on a net income basis in respect of income from common shares or ADSs), in which case the Non-U.S. Holder generally will be subject to U.S. federal income tax in respect of the dividends in the same manner as a U.S. Holder. Any such effectively connected dividends received by a corporate Non-U.S. Holder may also, under certain circumstances, be subject to an additional “branch profits tax” (at a 30% rate or at a reduced rate as may be specified by an applicable income tax treaty).

### ***Taxation of Capital Gains***

#### ***U.S. Holders***

Subject to the PFIC rules discussed below, upon a sale, redemption or other taxable disposition of common shares or ADSs, a U.S. Holder will recognize gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the U.S. dollar value of the amount realized (before deduction of any Brazilian tax) and the U.S. Holder's adjusted tax basis (determined in U.S. dollars) in the common shares or ADSs. Generally, a non-corporate U.S. Holder's gain or loss will be capital gain or loss taxed at a maximum rate of 20% where the property is held for more than one year. The deductibility of capital losses is subject to limitations under the Code.

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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 “—Brazilian Tax Considerations—Taxation of Gains”), the U.S. Holder may not be able to benefit from the foreign tax credit for that Brazilian income tax (*i.e.*, because the gain from the disposition would be U.S. source income), unless the U.S. Holder can apply the credit against U.S. federal income tax payable on other income from foreign sources. Alternatively, the U.S. Holder may be able to take a deduction for the Brazilian income tax if it does not elect to claim a foreign income tax credit for any foreign taxes paid or accrued during the taxable year.

#### *Non-U.S. Holders*

A Non-U.S. Holder will not be subject to U.S. federal income tax in respect of gain recognized on a sale, exchange or other taxable disposition of common shares or ADSs unless:

- the gain is effectively connected with a trade or business of the Non-U.S. Holder in the United States (or is attributable to a permanent establishment maintained in the United States by that Non-U.S. Holder, if an applicable income tax treaty so requires as a condition for that Non-U.S. Holder to be subject to U.S. taxation on a net income basis in respect of gain from the sale or other disposition of the common shares or ADSs); or
- in the case of a Non-U.S. Holder who is an individual, that Non-U.S. Holder is present in the United States for 183 or more days in the taxable year of the sale and certain other conditions apply.

Effectively connected gains realized by a corporate Non-U.S. Holder may also, under certain circumstances, be subject to an additional branch profits tax (at a 30% rate or at a reduced rate as may be specified by an applicable income tax treaty).

#### *Passive Foreign Investment Companies*

Based on current estimates of our gross income, gross assets and the nature of our business, we believe that our common shares and ADSs should not be treated as stock of a PFIC for U.S. federal income tax purposes. There can be no assurances in this regard, however, because the application of the relevant rules is complex and involves some uncertainty. The PFIC determination is made annually and is based on the portion of our assets and income that is characterized as passive under the PFIC rules. Moreover, our business plans may change, which may affect the PFIC determination in future years.

In general, we will be a PFIC with respect to a U.S. Holder if, for any taxable year in which the U.S. Holder held 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.

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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 NYSE, 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 minimis* 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 <http://www.sec.gov>. You may also inspect our reports and other information at the offices of the NYSE, 11 Wall Street, New York, New York 10005, on which the 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:

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- 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, due to *real*-denominated debt indexed to this interest rate; and
- CDI (benchmark Brazilian *real* overnight rate), due to our cash held in Brazil (onshore cash) and to our CDI indexed debt.

Exposure as of December 31, 2018*	Notional amount	Maturities					
		2019	2020	2021	2022	2023	Thereafter
(amortization)							
U.S. dollar LIBOR	4,800	969	2,348	1,021	462	-	-
U.S. dollar fixed rate	10,449	1,835	3,383	-	-	1,356	3,875
CDI	11,667	1,857	845	2,356	2,663	2,669	1,275
Euro fixed rate	213	107	106	-	-	-	-
TJLP	968	76	66	59	58	57	652
Other	555	547	5	3	-	-	-

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Exposure as of December 31, 2017*	Notional amount	Maturities					Thereafter
		2018	2019	2020	2021	2022	
<b>(amortization)</b>							
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	-

\*All figures in millions of *reais*.

Our cash and cash equivalents were as follows:

	December 31, 2018	December 31, 2017	Exposure
Cash in <i>reais</i> :	778	842	CDI
Cash in U.S. dollars:	379	781	LIBOR

The following table sets forth the average interest rate of our borrowings and financing:

Average interest rate <sup>(*)</sup>	Consolidated As of December 31, 2018 Total Debt	
	<i>(in thousands of R\$)</i>	
US\$	5.88%	15,950,646
R\$	8.19%	12,704,504
EUR	3.88%	287,591
		<b>28,942,741</b>

(\*) In order to determine the average interest rates for our borrowings and financing agreements with floating rates, we used rates as of December 31, 2018.

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, 2018**

<b>(in millions, unless otherwise indicated)</b>	<b>Functional Currency</b>	<b>Notional Amount</b>	<b>Average Interest</b>	<b>Average Maturity (days)</b>
<b>DI future</b>	Real	-	-	-
<b>Hedge accounting of export</b>	U.S. Dollar	2,076	-	
<b>Hedge accounting net investment</b>	Euro	48	-	
<b>CDI-to-fixed rate interest rate swap</b>	Real		-	
<b>Fixed rate-to-CDI interest rate swap</b>	Real		-	

**December 31, 2017**

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

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## 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.

	December 31, 2018	December 31, 2017
<b>U.S. dollar liabilities</b>		
Loans and financing	4,117	4,333
Trade accounts payable	175	97
Intercompany loans	0	0
Others	4	4
<b>Total liabilities</b>	<b>4,296</b>	<b>4,434</b>
<b>U.S. dollar assets</b>		
Offshore cash and cash equivalents	377	777
Guarantee margin	-	-
Trade accounts receivable	358	311
Advances to suppliers	-	-
Intercompany loans	0	0
Other	9	3
<b>Total assets</b>	<b>744</b>	<b>1,091</b>
<b>Total U.S. dollar exposure</b>	<b>(3,552)</b>	<b>(3,343)</b>
<b>Cash flow – hedge accounting</b>	<b>2,076</b>	<b>1,318</b>
<b>Total U.S. dollar net exposure</b>	<b>(1,476)</b>	<b>(2,025)</b>
<b>Perpetual bonds</b>	<b>1,000</b>	<b>1,000</b>
<b>Total U.S. dollar net exposure, excluding perpetual bonds</b>	<b>(476)</b>	<b>(1,025)</b>



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.

	December 31, 2018	December 31, 2017
<b>Euro liabilities</b>		
<b>Loans and financing</b>	49	73
<b>Trade accounts payable</b>	8	2
<b>Others</b>	1	3
<b>Total liabilities</b>	<b>58</b>	<b>78</b>
<b>Euro assets</b>		
<b>Offshore cash and cash equivalents</b>	3	3
<b>Trade accounts receivable</b>	1	3
<b>Intercompany loans</b>	-	-
<b>Advances to suppliers</b>	-	-
<b>Other</b>	5	4
<b>Total assets</b>	<b>9</b>	<b>9</b>
<b>Total euro exposure</b>	<b>(49)</b>	<b>(69)</b>
<b>Derivative notional</b>	0	0
<b>Investment – hedge accounting</b>	48	72
<b>Perpetual bonds</b>	-	-
<b>Total euro net exposure, excluding perpetual bonds</b>	<b>(1)</b>	<b>3</b>

### 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.

### 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 16% from 2016 to 2018.

***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	Probable scenario	December 31, 2018	
			Scenario 1	Scenario 2
U.S. dollar to <i>real</i>	3.8748	3.7626	4.8435	5.8122
Euro to <i>real</i>	4.439	4.2833	5.5488	6.6585

Interest	Interest rate	December 31, 2017	
		Scenario 1	Scenario 2
CDI	6.40%	8.00%	9.6%
TJLP	6.98%	8.73%	10.47%
LIBOR	2.88%	3.60%	4.32%

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

(\*) We calculated the probable scenario considering the following variations: 2.89% appreciation of the *real* against the U.S. dollar and 3.51% appreciation of the *real* against the euro.

Source: Central Bank as of January 25, 2019.

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

Scenarios 1 and 2 represent 25% and 50 %, respectively, interest volatility growth as of December 31, 2018.

				<b>Impact on profit or loss</b>		
(in thousands of RS)						
<b>Changes in interest rates</b>	<b>% p.a.</b>	<b>Assets</b>	<b>Liabilities</b>	<b>Probable scenario (*)</b>	<b>Scenario 1</b>	<b>Scenario 2</b>
TJLP	6.98		(954,635)	(2,793)	(16,658)	(33,316)
Libor	2.88		(4,799,586)	(47,391)	(34,505)	(69,010)
CDI	6.40	609,480	(11,667,006)	(53,528)	(176,924)	(353,848)

(\*) This sensitivity analysis assumes a probable scenario of interest rates as of December 31, 2018, as recorded in our assets and liabilities

### **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 the 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 depository, as set forth in the table below.

<b>Depository service</b>	<b>Fee payable by ADR holders</b>
<b>Issuance and delivery of ADRs, including in connection with share distributions or stock splits</b>	US\$5.00 for each 100 ADSs (or portion thereof)
<b>Deposit of securities, including in respect of share, rights and other distributions</b>	US\$5.00 for each 100 ADSs (or portion thereof)
<b>Withdrawal of deposited securities</b>	US\$5.00 for each 100 ADSs (or portion thereof)

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

The depository reimburses us for certain expenses we incur in connection with the ADR program, subject to a ceiling agreed between us and the depository 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, 2018, such reimbursements totaled US\$1.2 million.

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

None.

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

None.

## **PART II**

### **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, 2018, CSN's disclosure controls and procedures are effective.

#### **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.

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.

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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, 2018.

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

Grant Thornton Auditores Independentes, our independent registered public accounting firm, audited, as of December 31, 2018, our internal control over financial reporting. For Grant Thornton Auditores Independentes’ report dated April 4, 2019, see our audited consolidated financial statements included elsewhere herein.

### **Item 16. [Reserved]**

#### **16A. Audit Committee Financial Expert**

As of the date of this annual report, our audit committee comprises two members and we are looking to appoint a third member at our board of directors’ meeting following our next shareholders’ meeting. After reviewing the qualifications of the members of our audit committee, our board of directors has determined that each member of our audit committee qualifies as an “audit committee financial expert,” as defined by the SEC. In addition, both members of our audit committee meet the applicable independence requirements both under Brazilian Corporate Law and under the NYSE rules.

Our audit committee may be assisted by an external consultant, whenever necessary, that renders financial and consulting services, among others.

#### **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. Since 2017, our Code of Ethics is available on our intranet to be consulted and accepted by employees electronically. 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 2018. 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 [www.csn.com.br](http://www.csn.com.br).

#### **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 years ended December 31, 2018 and 2017, Grant Thornton Auditores

Independentes acted as our independent auditor.

The following table sets forth the services rendered and the related fees:

	<b>Year Ended December 31,</b>	
	<b>2018</b>	<b>2017</b>
	<i>(in thousands of R\$)</i>	
<b>Audit fees</b>	4,969	5,889
<b>Audit – related fees</b>	259	354
<b>Tax fees</b>	-	-
<b>Total</b>	5,228	6,243

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**Audit Fees**

Audit fees in 2018 and 2017 comprised 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 2018 and 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.

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 2018 and 2017, there were no fees for tax services provided by our independent auditors.

**16D. Exemptions from the Listing Standards for Audit Committees**

As of the date of this annual report, our audit committee comprises two members and we are looking to appoint a third member at our board of directors' meeting following our next shareholders' meeting. For a discussion on our audit committee, see "Item 6C. Board Practices—Fiscal Committee" and "Item 6C. Board Practices—Audit Committee."

**16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

In 2014, 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 2018, we maintained 7,409,500 shares in treasury.

Program	Board's Authorization	Authorized Quantity	Program Period	Number Bought Back	Shares Cancellation	Shares Sold	Balance in Treasury
1 <sup>st</sup>	03/13/2014	70,205,661	03/14/2014 04/14/2014	2,350,000			2,350,000
2 <sup>nd</sup>	04/15/2014	67,855,661	04/16/2014 05/23/2014	9,529,500			11,879,500
3 <sup>rd</sup>	05/23/2014	58,326,161	05/26/2014 06/25/2014	31,544,500			43,424,000
4 <sup>th</sup>	06/26/2014	26,781,661	06/26/2014 07/17/2014	26,781,661			70,205,661
5 <sup>th</sup>	07/18/2014 07/18/2014	64,205,661	07/18/2014 08/18/2014	240,400	60,000,000		10,205,661 10,446,061
6 <sup>th</sup>	08/19/2014	63,161,055	08/19/2014 09/25/2014	6,791,300	10,446,061		6,791,300
7 <sup>th</sup>	09/29/2014	56,369,755	09/29/2014 12/29/2014	21,758,600			28,549,900
8 <sup>th</sup>	12/30/2014	34,611,155		1,841,100			30,391,000

			12/31/2014		
			03/31/2015		
<b>9<sup>th</sup></b>	03/31/2015	32,770,055	04/01/2015	0	30,391,000
			06/30/2015		
<b>10<sup>th</sup></b>	04/20/2018	30,391,000	04/20/2018	22,981,500	7,409,500
			04/30/2018		

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\$181million. 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**

Not applicable.

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## **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.

#### ***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.

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### ***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 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. It also reports 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.

As of the date of this annual report, our audit committee comprises two members, Yoshiaki Nakano and Antonio Bernardo Vieira Maia, and we are looking to appoint a third member at our board of directors' meeting following our next shareholders' meeting. Both members of our audit committee satisfy the audit committee membership independence requirements set forth by the SEC and the NYSE. Each of the members of our audit committee has 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 6C. Board Practices—Fiscal Committee" and "Item 6C. Board Practices—Audit Committee."

### ***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. 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 or our Code of Ethics, institutional handbook or policies and procedures:

- 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

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**Item 17. Financial Statements**

See “Item 18. Financial Statements.”

**PART III****Item 18. Financial Statements**

Our following consolidated financial statements, together with the report of Grant Thornton Auditores Independentes thereon, are filed as part of this annual report.

	Page
<b>Report of Independent Registered Public Accounting Firm</b>	FS-R1
<b>Report of Independent Registered Public Accounting Firm</b>	FS-R2
<b>Report of Independent Registered Public Accounting Firm</b>	FS-R3
<b>Consolidated financial statements:</b>	
Balance sheets as of December 31, 2018 and 2017	FS- 1
Statements of income for the years ended December 31, 2018, 2017 and 2016	FS- 3
Statements of comprehensive income the years ended December 31, 2018, 2017 and 2016	FS- 4
Statements of cash flows for the years ended December 31, 2018, 2017 and 2016	FS- 5
Statements of changes in shareholders’ equity for the years ended December 31, 2018, 2017 and 2016	FS- 7
Notes to consolidated financial statements	FS- 9

**Item 19. Exhibits**

Exhibit Number	Description
<u>1.1</u>	<u>Bylaws of the registrant (English translation), incorporated herein by reference from our Form 6-K filed with the SEC on November 27, 2017.</u>
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.
<u>2.2</u>	<u>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.</u>
<u>2.3</u>	<u>Form of Amendment No. 2 to the Deposit Agreement, including the form of American Depositary Receipt, incorporated herein by</u>

		<u>reference from our Registration Statement on Form F-6POS filed with the SEC on January 5, 2011.</u>
		<u>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.</u>
<u>4.1</u>		
<u>8.1</u>	±	<u>List of Subsidiaries.</u>
<u>12.1</u>	±	<u>Section 302 Certification of Chief Executive Officer.</u>
<u>12.2</u>	±	<u>Section 302 Certification of Chief Financial Officer.</u>
<u>13.1</u>	±	<u>Section 906 Certification of Chief Executive Officer.</u>
<u>13.2</u>	±	<u>Section 906 Certification of Chief Financial Officer.</u>
<u>15.2</u>		<u>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.</u>
101.INS	+	XBRL Instance Document.
101.SCH	+	XBRL Taxonomy Extension Schema.
101.CAL	+	XBRL Taxonomy Extension Scheme Calculation Linkbase.
101.DEF	+	XBRL Taxonomy Extension Scheme Definition Linkbase.
101.LAB	+	XBRL Taxonomy Extension Scheme Label Linkbase.
101.PRE	+	XBRL Instance Document.

\* 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 4, 2019

Companhia Siderúrgica Nacional

By: */s/ Benjamin Steinbruch*

Title: Benjamin Steinbruch  
Chief Executive Officer

By: */s/ Marcelo Cunha Ribeiro*

Title: Marcelo Cunha Ribeiro  
Chief Financial and Investor  
Relations Officer

## 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, 2018, 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, 2018, 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, 2018, and our report dated April 04, 2019 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.

/s/ Grant Thornton Auditores Independentes

São Paulo, Brazil

April 04, 2019

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## 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 sheets of Companhia Siderúrgica Nacional and subsidiaries (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders’ equity and cash flows for each of the years in the two-year period ended December 31, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, 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, 2018, 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 04, 2019 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 audits 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 audits 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 audits 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 audits provide 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 9.d) and 28.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 in such note, indicate that a material uncertainty exists. TLISA's Management's plans in regard to these matters are also described in Note No 9.d) and 28.c). 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/ Grant Thornton Auditores Independentes

We have served as the Company's auditor since 2017.

São Paulo, Brazil

April 04, 2019

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

Companhia Siderúrgica Nacional

São Paulo - SP - Brazil

We have audited the accompanying consolidated statements of income, comprehensive income, changes in equity and cash flows of Companhia Siderúrgica Nacional and subsidiaries (the "Company") for the year 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 results of the operations and the cash flows of the Company for the year 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 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) to the consolidated financial statements of the year ended December 31, 2016, dated December 22, 2017. 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

<b>Assets</b>	<b>Note</b>	<b>2018</b>	<b>2017</b>
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	4	2,248,004	3,411,572
Financial Investments measured at amortized cost	5	895,713	735,712
Trade receivables	6	2,078,182	2,197,078
Inventories	7	5,039,560	4,464,419
Other current assets	8	1,753,024	1,072,715
<b>Total current assets</b>		<b>12,014,483</b>	<b>11,881,496</b>
<b>NON-CURRENT ASSETS</b>			
Financial Investments measured at amortized cost	5	7,772	
Deferred income taxes	15.b	89,394	63,119
Other non-current assets	8	4,285,223	2,528,475
		<b>4,382,389</b>	<b>2,591,594</b>
Investments in associates and joint controlled entities	9.b	5,630,613	5,499,995
Property, plant and equipment	10	18,046,864	17,964,839
Intangible assets	11	7,253,175	7,272,046
<b>Total non-current assets</b>		<b>35,313,041</b>	<b>33,328,474</b>
<b>TOTAL ASSETS</b>		<b>47,327,524</b>	<b>45,209,970</b>

The accompanying notes are an integral part of these consolidated financial statements.

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**Companhia Siderúrgica Nacional and Subsidiaries**

Consolidated Balance Sheets as of December 31

Thousands of Brazilian Reais

<b>Liabilities and shareholders' equity</b>	<b>Note</b>	<b>2018</b>	<b>2017</b>
<b>CURRENT LIABILITIES</b>			
Payroll and related taxes		248,185	252,418
Trade payables		3,473,822	2,505,695
Taxes payable		251,746	264,097
Borrowings and financing	12	5,653,439	6,526,902
Other payables	14	1,704,857	1,014,980
Provisions for tax, social security, labor and civil risks	17	106,503	105,958
<b>Total current liabilities</b>		<b>11,438,552</b>	<b>10,670,050</b>
<b>NON-CURRENT LIABILITIES</b>			
Borrowings and financing	12	23,173,635	22,983,942
Other payables	14	227,328	129,323
Deferred income taxes	15.b	601,731	1,173,559
Provisions for tax, social security, labor and civil risks	17	685,953	719,133
Pension and healthcare plan	27.c	905,119	908,721
Provision for environmental liabilities and decommissioning of assets	18	281,766	337,013
<b>Total non-current liabilities</b>		<b>25,875,532</b>	<b>26,251,691</b>
<b>Shareholders' Equity</b>			
	<b>20</b>		
Issued capital		4,540,000	4,540,000
Capital reserves		32,720	30
Legal reserves		189,122	
Earnings reserves		2,933,969	238,976
Treasury Shares		(58,264)	(238,976)
Accumulated Profit / (Loss)			(1,291,689)
Other comprehensive income		1,065,188	3,779,032
<b>Total equity attributable to owners of the Company</b>		<b>8,702,735</b>	<b>7,027,373</b>
<b>Non-controlling interests</b>		<b>1,310,705</b>	<b>1,260,856</b>
<b>Total equity</b>		<b>10,013,440</b>	<b>8,288,229</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b>47,327,524</b>	<b>45,209,970</b>

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

	<b>Note</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Net Revenue from sales and/or services</b>	<b>22</b>	<b>22,968,885</b>	<b>18,524,601</b>	<b>17,148,949</b>
Cost of sales and/or services	23	(16,105,657)	(13,596,141)	(12,640,042)
<b>Gross profit</b>		<b>6,863,228</b>	<b>4,928,460</b>	<b>4,508,907</b>
<b>Operating income (expenses)</b>		<b>83,332</b>	<b>(1,944,495)</b>	<b>(2,563,431)</b>
Selling expenses	23	(2,263,688)	(1,815,107)	(1,696,896)
General and administrative expenses	23	(494,023)	(415,841)	(518,232)
Other operating income	24	4,036,043	824,286	663,509
Other operating expenses	24	(1,330,706)	(646,944)	(1,076,730)
Equity in results of affiliated companies	9.b	135,706	109,111	64,918
<b>Profit before financial income (expenses) and taxes</b>		<b>6,946,560</b>	<b>2,983,965</b>	<b>1,945,476</b>
Financial income	25	1,310,514	295,074	643,590
Financial expenses	25	(2,806,157)	(2,758,701)	(3,166,017)
<b>Profit (Loss) before income taxes</b>		<b>5,450,917</b>	<b>520,338</b>	<b>(576,951)</b>
Income tax and social contribution	15.a	(250,334)	(409,109)	(266,546)
<b>Profit (Loss) from continued operations</b>		<b>5,200,583</b>	<b>111,229</b>	<b>(843,497)</b>
<b>Profit (Loss) from discontinued operations</b>				<b>(9,561)</b>
<b>Net income (loss) for the year</b>		<b>5,200,583</b>	<b>111,229</b>	<b>(853,058)</b>
<b>Profit (Loss) for the year attributed to:</b>				
Controlling interests		5,074,136	10,272	(934,747)
Non-controlling interests		126,447	100,957	81,689
Earnings (loss) per common share - (reais/share)				
Basic	20.g	3.69498	0.00757	(0.68876)
Diluted	20.g	3,69498	0.00757	(0.68876)

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

	Note	2018	2017	2016
<b>Consolidated profit (loss) for the year</b>		<b>5,200,583</b>	<b>111,229</b>	<b>(853,058)</b>
<b>Items that will not be subsequently reclassified to the statement of income</b>				
Actuarial (losses)/gains on defined benefit plan from investments in subsidiaries		903	(12)	87
Actuarial (losses)/gains on defined benefit pension plan		413	(203,022)	(219,417)
Income tax and social contribution on actuarial (losses) gains on defined benefit pension plan			(1,073)	(2,619)
		<b>1,316</b>	<b>(204,107)</b>	<b>(221,949)</b>
<b>Items that could be subsequently reclassified to the statement of income</b>				
Cumulative translation adjustments for the year		(87,101)	170,342	(486,890)
Fair Value through other comprehensive income		(1,559,680)	847,849	711,942
(Loss)/Gain on change in percentage of investments		(105)	2,814	1,299
(Loss) gain on cash flow hedge accounting	13.b	(1,415,962)	(50,987)	1,005,968
Cash Flow hedge reclassified to income statement	13.b	370,191	92,140	77,444
(Loss) /gain on hedge of net investments in foreign subsidiaries	13.b	(21,852)	(39,893)	77,952
(Loss) / gain on business combination		(651)	4,415	
		<b>(2,715,160)</b>	<b>1,026,680</b>	<b>1,387,715</b>
<b>Other comprehensive income</b>		<b>(2,713,844)</b>	<b>822,573</b>	<b>1,165,766</b>
<b>Comprehensive income (loss) for the year</b>		<b>2,486,739</b>	<b>933,802</b>	<b>312,708</b>
<b>Attributable to:</b>				
Attributed to owners of the Company		2,360,292	832,845	231,019
Attributed to non-controlling interests		126,447	100,957	81,689

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	2018	2017	2016
Profit (Loss) for the year		5,200,583	111,229	(853,058)
<b>Adjustments to reconcile net income (loss) to net cash provided by operations:</b>				
Accrued charges on borrowings and financing		1,938,077	2,346,598	2,944,558
Charges on loans and financing granted		(50,239)	(54,777)	(58,731)
Depreciation/ depletion / amortization	10 and 11	1,273,021	1,453,335	1,322,497
Equity in results of affiliated companies	9.b	(135,706)	(109,111)	(64,918)
Deferred income tax and social contribution		(576,895)	50,128	60,368
Provision for tax, social security, labor and civil risks		(34,279)	10,166	(25,642)
Monetary variations and exchange differences		1,023,695	250,660	(1,038,018)
Gain/(Loss) of derivative financial instruments	13.b		(28,503)	(5,467)
Eletrobrás's compulsory loan	24		(755,151)	
Proceeds from disposal of fixed and intangible assets	10 and 11	38,245	28,127	88,339
Gain on repurchase of debt securities				(146,214)
Provision (Reversal) for consumption and services	14	55,726	(44,921)	
Provision for actuarial liabilities		(20,984)	(36,953)	(18,803)
PIS and COFINS credits	8	(2,208,462)		
Gain on business combination				(66,496)
Net gain on sale of a foreign subsidiary	24	(1,164,294)		
Gain on disposal of available for sale				(252,023)
Provision for environmental liabilities and decommissioning of assets	18	(55,247)	(10,051)	18,133
Impairment of Transnordestina				387,989
Updated shares – Fair value through profit or loss (VJR)	24	(1,655,813)		
Other provisions		(43,435)	82,682	(993)
		<b>3,583,993</b>	<b>3,293,458</b>	<b>2,291,521</b>
<b>Changes in assets and liabilities</b>				
Trade receivables - third parties		99,223	(300,449)	(388,469)
Trade receivables - related parties		22,071	14,449	(3,956)
Inventories		(800,050)	(442,109)	947,834
Receivables from related parties/Dividends		113,800	68,224	34,082
Recoverable taxes		238,181	(100,470)	275,018

Trade Accounts Payable Turnover Ratio

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Judicial deposits	(7,496)	(6,720)	38,910
Trade payables	990,942	711,953	482,009
Payroll and related taxes	(1,100)	(3,658)	(5,691)
Taxes in installments - REFIS	(23,806)	23,775	(253,374)
Payables to related parties	129,031	46,081	(9,726)
Interest paid	(2,141,710)	(2,634,931)	(3,050,036)
Interest received			19,636

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Interest on swaps paid			(3,999)
Other		5,026	(97,752)
<b>Increase (Decrease) in assets and liabilities</b>		<b>(1,375,888)</b>	<b>(2,721,607)</b>
<b>Net cash generated by operating activities</b>		<b>2,208,105</b>	<b>571,851</b>
Investments / acquisition of shares		(218,840)	(190,435)
Purchase of property, plant and equipment	10	(1,317,102)	(1,059,481)
Receipt/(Payment) in derivative transactions		(372)	30,453
Purchase of intangible assets	11	(2,200)	(622)
Loans granted to related parties		(101,908)	(49,072)
Financial investment, net of redeemed amount	5	(167,773)	24,679
Loans received from related parties			4,819
Cash received by disposal of Usiminas' shares		39,377	
Cash and cash equivalents from discontinued operations			331,835
Net cash received from the sale of a foreign subsidiary		1,670,359	
Cash and cash equivalents on acquisition of control			941
<b>Net cash used in investing activities</b>		<b>(98,459)</b>	<b>(1,049,224)</b>
Borrowings and financing raised	12.b	2,143,679	534,506
Cost of borrowing		(92,287)	(238)
Payment of borrowings	12.b	(5,019,978)	(1,528,023)
Payment of dividends and interests on shareholder's equity		(502,002)	(53)
Treasury shares		213,402	
Forfeiting funding / drawee risk			78,240
Forfeiting amortization / drawee risk			(407,155)
Buyback of debt securities			(151,098)
<b>Net cash used in financing activities</b>		<b>(3,257,186)</b>	<b>(993,755)</b>
<b>Exchange rate changes on cash and cash equivalents of foreign subsidiaries</b>		<b>(16,028)</b>	<b>11,538</b>
Increase (Decrease) in cash and cash equivalents		(1,163,568)	(1,459,590)
Cash and cash equivalents at the beginning of the year		3,411,572	4,871,162
<b>Cash and cash equivalents at the end of the year</b>		<b>2,248,004</b>	<b>3,411,572</b>

The accompanying notes are an integral part of these consolidated financial statements.

**Companhia Siderúrgica Nacional and Subsidiaries**

Consolidated Statement of Changes in Shareholders' Equity

Thousands of Brazilian reais

	Paid-in Capital	Capital Reserve	Earnings Reserve	Retained earnings/ (accumulated losses)	Other comprehensive income	Shareholders' Equity	Non-Control interests
<b>Balances at December 31, 2015</b>	4,540,000	30		(367,214)	1,790,693	5,963,509	1,127,000
<b>Total comprehensive income</b>				(934,747)	1,165,766	231,019	81,000
Profit (loss) for the year				(934,747)		(934,747)	81,000
<b>Other comprehensive income</b>					1,165,766	1,165,766	
Cumulative translation adjustments for the period					(486,890)	(486,890)	
Actuarial gain (loss) on defined benefit pension plan, net of taxes					(221,949)	(221,949)	
Gain/(Loss) on available-for-sale assets, net of taxes					711,942	711,942	
Gain/(loss) on percentage change in investments					1,299	1,299	
Gain/(loss) on cash flow hedge accounting, net of taxes					1,083,412	1,083,412	
Gain/(loss) on hedge of net investments in foreign subsidiaries					77,952	77,952	
Internal changes in shareholders' equity							(19,000)

<b>Non-controlling interests in subsidiaries</b>						
<b>Balances at December 31, 2016</b>	<b>4,540,000</b>	<b>30</b>	<b>(1,301,961)</b>	<b>2,956,459</b>	<b>6,194,528</b>	<b>1,189,000</b>
<b>Total comprehensive income</b>			<b>10,272</b>	<b>822,573</b>	<b>832,845</b>	<b>100,000</b>
Profit (loss) for the year			10,272		10,272	100,000
<b>Other comprehensive income</b>				<b>822,573</b>	<b>822,573</b>	
Cumulative translation adjustments for the period				170,342	170,342	
Actuarial 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				41,153	41,153	
Gain/(loss) on hedge of net investments in foreign subsidiaries				(39,893)	(39,893)	
Gain/(loss) on business combination				4,415	4,415	
Internal changes in shareholders' equity						(30,000)
<b>Non-controlling interests in subsidiaries</b>						<b>(30,000)</b>
	<b>4,540,000</b>	<b>30</b>	<b>(1,291,689)</b>	<b>3,779,032</b>	<b>7,027,373</b>	<b>1,260,000</b>

**Balances at  
December 31,  
2017**

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Capital transactions with shareholders	32,690	180,712	(898,332)		(684,930)		(684,930)
Sales of treasury shares		180,712			180,712		180,712
Dividends			(898,332)		(898,332)		(898,332)
Profit on disposal of shares	32,690				32,690		32,690
<b>Total comprehensive income</b>			5,074,136	(2,713,844)	2,360,292	126,447	2,486,739
Profit/(loss) for the year			5,074,136		5,074,136	126,447	5,200,583
<b>Other comprehensive income</b>				(2,713,844)	(2,713,844)		(2,713,844)
Cumulative translation adjustments for the period				(87,101)	(87,101)		(87,101)
Actuarial gain/(loss) on defined benefit pension plan, net of taxes				1,316	1,316		1,316
Gain/(Loss) on available-for-sale assets, net of taxes				(1,559,680)	(1,559,680)		(1,559,680)
Gain/(loss) on percentage change in investments				(105)	(105)		(105)
Gain/(loss) on cash flow hedge accounting, net of taxes				(1,045,771)	(1,045,771)		(1,045,771)
Gain/(loss) on hedge of net investments in foreign subsidiaries				(21,852)	(21,852)		(21,852)
Gain/(loss) on business combination				(651)	(651)		(651)
Constitution of reserves		2,884,115	(2,884,115)				

<b>Non-controlling interests in subsidiaries</b>					<b>(76,598)</b>	<b>(76,598)</b>
<b>Balances at December 31, 2018</b>	<b>4,540,000</b>	<b>32,720,064,827</b>	<b>1,065,188</b>	<b>8,702,735</b>	<b>1,310,705</b>	<b>10,013,440</b>

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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 in São Paulo, SP, Brazil.

CSN is listed on the São Paulo Stock Exchange (B3 S.A. - Brasil, Bolsa, Balcão) and on the New York Stock Exchange (NYSE). 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 production, distribution and sale of flat steel, long steel, metallic containers and galvanized steel. In addition to the facilities in Brazil, CSN has commercial activities in the United States and operations in 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 Itaguaí – (“TECAR”), a solid bulk terminal, one of the four terminals that compose the Port of Itaguaí, 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 material being sold to subsidiaries and third parties.

The Company's mining activities utilize tailings dams for which all appropriate measures are taken to mitigate the risks inherent to the handling and disposal of the tailings and to comply with current environmental legislation. It is important to reiterate that operating without dependence on these dams is a priority in our mining activities, for which investments of around R\$ 250 million in dry stacking technology have already been made. In this context, it is expected that CSN Mineração will be fully processing the tailings in the dry process by the end of 2019, subject to revision of projects and expected deadlines, proper operation of equipment and unforeseen delays. As a consequence of these measures, decommissioning of dams is the natural way of processing dry tailings.

All of our dams, both mining and hydroelectric dams, are positively certified and comply with the environmental legislation in force.

- **Cement:**

CSN entered in the cement market boosted by the synergy between this new activity and its existing businesses. Next to the 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. Additionally, the operation of its second clinker production line is located in Arcos/MG.

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- **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 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 subsidiary Sepetiba Tecon S.A., operates the Container Terminal (“TECON”) and by means of its subsidiary CSN Mineração, the TECAR, 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; our exports of iron ore are performed using the TECAR terminal; additionally, we use the terminal for 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.

The note 26 - "Segment Information" details the financial information per each of CSN's business segment.

- **Going Concern**

In 2018, the Company amortized principal and interest in the approximate amount of R\$7.1 billion of its loans and financing. In 2019, loans and interest to be incurred next year, are expected to be paid in the approximate amount of R\$3.5 billion. The financial leverage may adversely affect the businesses, financial conditions and operating results. Which can entail the following considerations:

- Allocation of a substantial part of the cash generated from operations for repayment of the borrowings.
- Exposure 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, therefore, 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.

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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. Always committed to the plan to extend its debt payment term, mainly those of short term, the company's management concluded, in February 2018, the reprofile of its debts at R\$ 4.98 billion with Banco do Brasil, extending the maturity dates from 2018 to 2022 for maturities up to 2024. Still in February 2018, the company 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 conjunction, 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 operational period until December 2019, 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 its operations in a reasonably estimable period of time. Accordingly, the Company's financial statements for the year ended December 31, 2018 were prepared based on the assumption of going concern.

## **2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

### **2.a) Basis of preparation and declaration of conformity**

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) and includes all of the relevant information of the financial statements.

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 an 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 4, 2019.

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**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, 2018 and 2017 include the following direct and indirect subsidiaries, joint ventures and joint operations, as well as the exclusive funds, as follows:

Companies	Equity interests (%)		Core business
	12/31/2018	12/31/2017	
<b>Direct interest in subsidiaries: full consolidation</b>			
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	Equity interests
CSN Export Europe, S.L.U. (1)		100.00	Financial transactions and Equity interests
CSN Metals S.L.U. (1)		100.00	Equity interests and Financial transactions
CSN Americas S.L.U. (1)		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
Companhia Metalúrgica Prada	99.99	99.99	Manufacture of containers and distribution of steel 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.	99.99	99.99	Sale of electric power
FTL - Ferrovia Transnordestina Logística S.A.	91.69	90.78	Railroad logistics
Nordeste Logística S.A.	99.99	99.99	Port services
Aceros México CSN (2)	0.08		Commercial representation, sales of steel and related activities
CSN Inova Ltd.(3)	100.00		Advisory and implementation of new development projects

**Indirect interest in subsidiaries:  
full consolidation**

Companhia Siderúrgica Nacional (4)		100.00	Steel
Lusosider Projectos Siderúrgicos S.A.	100.00	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	99.00	99.99	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
CSN Steel Holdings 1, S.L.U.	100.00	100.00	Financial transactions, product sales and Equity interests
CSN Productos Siderúrgicos S.L.	100.00	100.00	Financial transactions, product sales and Equity interests
Stalwerk 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
CSN Mining Holding, S.L	87.52	87.52	Financial transactions, product sales and Equity interests
CSN Mining GmbH	87.52	87.52	Financial transactions, product sales and Equity interests
CSN Mining Asia Limited	87.52	87.52	Commercial representation
Aceros México CSN (2)	99.92	100.00	Commercial representation, sale of steel and related activities
Lusosider Ibérica S.A	100.00	99.94	Steel, commercial and industrial activities and equity interests
CSN Mining Portugal, Unipessoal Lda.	87.52	87.52	Commercial and representation of products
Companhia Siderúrgica Nacional, LLC (4)	100.00		Import and distribution/resale of products
<b>Direct interest in joint operations</b>			
Itá Energética S.A.	48.75	48.75	Electric power generation
Consórcio da Usina Hidrelétrica de Igarapava	17.92	17.92	Electric power consortium
<b>Direct interest in joint ventures</b>			
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	46.30	Railroad logistics

**Indirect interest in joint ventures**

MRS Logística S.A.	16.30	16.30	Railroad transportation
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**Direct interest in associates**

Arvedi Metalfer do Brasil S.A.	20.00	20.00	Metallurgy and Equity interests
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(\* ) They are Dormant Companies therefore they do not appear in the note 9.a, where is disclosed business information under the equity method and fair value through profit or loss and comprehensive income.

• **Events in 2018:**

(1) On February 6, 2018, the Spanish commercial registry recognized the merger by absorption of the companies by CSN Steel, S.L.U., the date from which the companies were considered legally extinct, before third parties and for the purposes of commercial law, the merger is retroactive to the date of December 28, 2017;

(2) Transfer of 1% stake in Aceros Mexico CSN from CSN Steel to Companhia Siderúrgica Nacional occurred on February 1, 2018. On September 18, 2018, CSN Steel increased the capital of Aceros Mexico CSN, diluting the direct interest of Companhia Siderúrgica Nacional to 0.08%, with CSN Steel holding 99.92%. On February 1, 2019, the Federal Taxpayers' Registry was canceled and, therefore, the settlement process of Aceros Mexico CSN was terminated, however, before third parties and for the purposes of commercial law, the settlement was retroactive to September 18, 2018;

(3) Company incorporated in 2018.

(4) On June 5, 2018 CSN LLC had its corporate name changed to "Heartland Steel Processing, LLC". On the same date, a new company was incorporated under the name "Companhia Siderúrgica Nacional, LLC", a wholly owned subsidiary of Heartland Steel Processing, LLC. On June 28, 2018, Companhia Siderúrgica Nacional, LLC., became a wholly-owned subsidiary of CSN Steel and, on June 29, 2018, Heartland Steel Processing, LLC was sold to Steel Dynamics, Inc. The remaining assets are registered at Companhia Siderúrgica Nacional, LLC, a subsidiary of CSN Steel (see note 3).

• **Exclusive funds**

Exclusive funds	Equity interests (%)		Core business
	12/31/2018	12/31/2017	
<b>Direct interest: full consolidation</b>	100.00	100.00	Investment fund

Diplic II - Private credit balanced mutual 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 expenses, 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**

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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 expenses, 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**

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**

According to IAS 21 – The effects of changes in foreign exchange rates, 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, 2018 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.

According to IAS 21 and IFRIC 22 – foreign currency transactions and advance consideration, the transactions in which the Company recognizes a non-monetary asset or non-monetary liability involving prepayments or receipts in foreign currency are recorded at the exchange rate of the date the entity initially recognized (transaction date) the non-monetary asset or non-current liability monetary.

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The balances of assets and liabilities are translated by exchange rates prevailing at the end of the reporting period. As of December 31, 2018, US\$1 is equal to R\$3.8748 (R\$3.3080 at December 31, 2017) and €1 is equal to R\$4.4390 (R\$3.9693 at December 31, 2017), according to the rates obtained from Central Bank of Brazil website.

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 expenses.

### **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.

## **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 5.

## **2.e) Trade receivables**

Trade receivables are initially recognized at fair value, including the related taxes and expenses, being foreign currency-denominated trade receivables are adjusted at the exchange rate in effect at the end of the reporting period. The accounts receivable with a receipt period of more than 90 days are subject to a present value adjustment and analysis regarding the operation.

With the adoption of the new IFRS 9 - Financial instruments, the Company started to apply the new model of expected losses, where it considers all possible loss events over the life of its receivables. These expected credit losses are estimated according to the loss rate by maturity range adopted by the Company since the initial (recognition) date of the asset.

The Company considers customer history, default rate, financial situation and the position of its legal advisors to estimate the expected credit losses.

## **2.f) Inventories**

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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 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.

## **2.h) Business combination**

The acquisition method is used to account for on each business combination conducted by the Company. The consideration 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 10. 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;

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- 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 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.

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 on the exploration or recovery periods estimated.

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 on purchase is recognized as a gain in profit for the period 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 or group of CGUs that are expected to benefit from the business combination in which the goodwill arose, and if that unit is not greater than the operating segment.

- **Software**

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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 in up to 10 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 at the amount at which the carrying amount of the asset exceeds its 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.l) 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 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 or 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.

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## **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.

The Company's concession contracts are not within the scope of IFRIC12 – Service Concession Arrangements, 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 have operating leasing characteristics. Therefore, the accounting should follow the accounting rules applicable to leases, according IAS 17 - 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, 2018 are listed below with an indication of their classification in our financial statements:

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<b>Concession</b>	<b>Net book value (R\$)</b>	<b>Classification in balance sheet</b>
Sepetiba Tecon S.A. (TECON)	347 million	Fixed assets and intangible (Software)
Tecar (CSN Mineração)	1,616 million	Fixed assets and intangible (Software)
FTL - Ferrovia Transnordestina Logística S.A. (FTL)	227 million	Fixed assets
Transnordestina logística S.A. (TLSA)	8,439 million <sup>(1)</sup>	Investment

(1) The amount of fixed and intangible assets is recognized in TLSA's financial statements. The Company recognizes its interest in the assets under the equity method.

## 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

As of January 1, 2018, IFRS 15 was adopted by the Company, all assets are recorded according to the respective practice.

Operating revenue from the sale of goods in the normal course of business is measured at the fair value of the consideration that the entity expects to receive in exchange for the delivery of the good or service promised to the client.

Revenue recognition occurs when or as the entity satisfies a performance obligation by transferring the good or service to the customer, understanding that performance obligation is an enforceable promise in a contract with a customer for the transfer of a good / service or a series of goods or services.

The transfer is considered to be effected when or as the customer obtains control of that asset.

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.

Freight export services under the CFR (Cost and Freight) and CIF (Cost, Insurance and Freight) modalities, where the Company is responsible for the freight service, are considered separate services and therefore a separate obligation, with their allocation apart of the price of the transaction and with recognition of the service over time. Such revenue allocated to freight does not significantly affect the results of the Company's fiscal year and, therefore, it is not presented separately in the financial statements. For other services rendered, revenue is recognized based on its realization over time.

## **2.q) Financial income and financial expenses**

Financial income includes interest income from funds invested, dividend income not accounted for under the equity method, 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.

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Financial expenses comprise interest expenses on borrowings, dividends on preferred shares classified as liabilities, 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.

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.

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## **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.

## **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**

As of January 1, 2018, IFRS 9 was adopted by the Company, all assets and liabilities are recorded according to the respective practice.

### **i) Financial assets**

Financial assets are classified into the following categories: assets measured at amortized cost, fair value through profit or loss and fair value through other comprehensive income. Assets are classified according

to the definition of the business plan adopted by the Company and the characteristics of the cash flow of the financial asset.

- **Recognition and measurement**

The Company classifies, at initial recognition, its financial assets into three categories: i) assets measured at amortized cost ii) fair value through profit or loss and iii) fair value through other comprehensive income.

- **Amortized cost**

Assets measured at amortization cost must be measured if both of the following conditions are met: i) the financial asset is maintained within the business plan whose objective is to maintain financial assets for the purpose of receiving contractual cash flows ii) the contractual terms of the financial asset give rise, on specific dates, to cash flows that exclusively constitute payments of principal and interest on the principal amount outstanding, the Company shall recognize its interest income, exchange gains and losses and impairment directly in the income statement

- **Fair value through profit or loss**

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Financial assets should be measured at fair value through profit or loss only if they are not measured as assets measured at amortized cost or fair value through other comprehensive income. The Company must recognize its interest income, foreign exchange gains and losses, impairment, and other net income are recognized directly in income.

- **Fair value through other comprehensive income.**

Financial assets shall be measured at fair value through comprehensive income only when the following conditions are met: i) the financial asset is maintained within a business plan whose objective is achieved by the receipt of contractual cash flow and by the sale of financial assets, ii) the contractual terms of the financial asset give rise, in specific dates and interest on the value of the outstanding principal.

The assets measured at fair value through other comprehensive income are classified into two categories: i) debt instruments in which the interest income calculated using the effective interest method, the foreign exchange gains and losses and the impairment are recognized in the statement of income. Other net income is recognized directly in the Company's equity, in "other comprehensive income". In derecognition of the asset, the accumulated result in other comprehensive income is reclassified to income, and ii) equity instrument in which these assets are measured subsequent to the fair value. The dividends are recognized as a gain in profit or loss, unless the dividend represents a clear recovery of part of the cost of the investment. Other net income is recognized directly in the Company's equity in "other comprehensive income" and is never reclassified to income.

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.

- **Derecognition of financial assets**

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.

If the company holds substantially all the risks and rewards of ownership of the financial asset, it must continue to recognize the financial asset.

## **ii) Financial liabilities**

Financial liabilities are classified under the following categories: financial liability at amortized cost, fair value through profit or loss. Management determines the classification of its financial liabilities at the time of initial recognition.

- **Financial liabilities measured at amortized cost**

The Company shall classify all its financial liabilities as amortized cost, except financial liabilities classified at fair value through profit or loss, derivative liabilities, collateral agreement.

Other financial liabilities are measured at amortized cost using the effective interest method. The interest expenses, gains and losses are recognized in the income statement.

The Company holds the following non-derivative financial liabilities: borrowings, financing and debentures and trade payables.

- **Financial liabilities at fair value through profit or loss**

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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

- **Derecognition of financial liabilities**

Financial liabilities are written off only when they are extinguished, that is, when the obligation specified in the agreement is settled, canceled or expires. The Company also derecognizes a financial liability when the terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

- iii) **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 (expenses)” in the income statement.

- **Cash flow Hedge**

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 realized in operational results in the periods when the forecast exports affect the result.

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 operational result. 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 operational”.

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The movements of the hedge amounts denominated as export cash flow hedges are shown in note 13 – 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 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 other operating, 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 an 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 13 – 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.

## **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.

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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, that is, as of January 1, 2019, 2020 and 2021 and were not early adopted by the Group for the year ended December 31, 2018:

Standard	Main items introduced by the standard	Effective date
IFRS16 – Leases	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 right to use the leased asset and a lease liability 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.	January 1, 2019

	IFRS 16 replaces existing lease standards, including IAS 17 - Leasing operations and IFRIC 4, SIC 5 and SIC 27 - Complementary aspects of leasing operations	
IFRIC 23 – Uncertainty over Income Tax Treatments	Can be unclear how tax law applies to a particular transaction or circumstance. This interpretation complements IAS 12 – Income Tax, to clarify how to reflect the effects of uncertainty over income tax treatments.	January 1, 2019
The Conceptual framework for financial reporting	Review of the Conceptual Framework by establishing a comprehensive set of concepts for guidance on financial performance reporting; better definitions and guidelines, highlighting the definition of a liability; and clarification in relevant areas.	January 1, 2020

The following information presents the possible impacts on the adoption of IFRS16 – Leases and IFRIC 23 – Uncertainty over Income Tax Treatments, 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 is disclosed in the 2019 financial statements.

- **IFRS 16 – Leases**



IFRS 16 aims to unify the accounting model of the lease, requiring lessee to recognize the assets and liabilities of all leases at present value, unless it has the following characteristics that are in the scope exemption from the rule: (i) contract with a term of not more than twelve months; and ii) has a low value or is based on variable values.

The Company concluded that with the adoption of the standard, we will have a reduction in operating expenses and an increase in financial expenses, once the asset "right of use" is amortized and the lease liability is updated to reflect the consideration to be paid over the contract period.

The standard is applicable as from January 1, 2019, the Company opted to apply the modified retrospective approach, recognizing the cumulative effect as an adjustment in the opening balance.

The Company estimates the impact of R\$578 million in the consolidation in the initial recognition of the right of use and lease liabilities.

- **IFRIC 23 - Uncertainty over Income Tax Treatments**

This interpretation is intended to clarify how the company should evaluate the uncertainties in accounting for income taxes when the applicable legislation is not clear.

The company evaluated current events and the accounting treatment applied in each situation in the light of this interpretation, we concluded that IFRIC 23 does not have effects arising from tax positions adopted that may be challenged by the Brazilian tax authorities.

### **3 SALE OF FOREIGN SUBSIDIARY**

During the second quarter of 2018, Companhia Siderúrgica Nacional ("CSN") announced to its shareholders and to the market, through a Material Fact, the sale by its wholly-owned subsidiary CSN Steel S.L.U., total interest in Heartland Steel Processing, LLC, new corporate name of Companhia Siderúrgica Nacional LLC ("LLC") to Steel Dynamics, Inc. ("SDI"), approved on the same date by the Board of

Directors. The LLC is located in the United States with operations in stripping, cold rolling and galvanizing of flat steel.

Still in the second quarter of 2018, after fulfilling all the precedent conditions foreseen in the purchase and sale agreement entered into with SDI, the Company concludes the transaction with the transfer of the equity interest and receipt of the base value of the transaction, adjusted in US\$ 400 million, as shown below:

	06/30/2018		Change in working capital		In 2018
	U\$\$	R\$	U\$\$	R\$	R\$
Receipt from disposal of the investment	395,661	1,525,590			1,525,590
Deposit in Warranty	2,000	7,712			7,712
Contractual expenses and fees (d)	2,339	9,021			9,021
<b>Basis price for alienation (a)</b>	<b>400,000</b>	<b>1,542,323</b>			<b>1,542,323</b>
Working Capital Receivable (b) (*)	34,008	131,127	3,581	14,402	145,529
<b>Shareholder's Equity da LLC (c)</b>	<b>133,445</b>	<b>514,537</b>			<b>514,537</b>
<b>Net gain of alienation = (a+b-c-d)</b>	<b>298,224</b>	<b>1,149,892</b>	<b>3,581</b>	<b>14,402</b>	<b>1,164,294</b>

(\*) The final value of the transaction was subject to post-closing adjustment of working capital, which was completed in September 2018. The working capital of LLC ascertained and received was US\$37,589 equivalent to R\$145,529. The sale of LLC generated a cumulative gain in the year of 1,164,294 (see note 24).

The net investment, results and cash flows from the sale of the investment are summarized below:

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**3.a) Balance sheet**

	<b>LLC</b>
	<b>06/30/2018</b>
<b>ASSETS</b>	
<b>Current Assets</b>	<b>418,014</b>
Cash and cash equivalents	760
Trade Receivable	114,266
Inventory	299,373
Other current assets	3,615
<b>Non-current assets</b>	<b>191,431</b>
Other non-current assets	205
Property, plant and equipment	191,226
<b>TOTAL ASSETS</b>	<b>609,445</b>
<b>LIABILITIES</b>	
<b>Current Liabilities</b>	<b>89,810</b>
Borrowings and Financing	5,446
Social and Labor obligations	5,526
Trade payables	76,400
Tax payables	1,398
Other payables	1,040
<b>Non-current liabilities</b>	<b>5,098</b>
Borrowings and Financing	5,098
<b>Shareholders' equity (disposal)</b>	<b>514,537</b>
<b>TOTAL LIABILITIES</b>	<b>609,445</b>

**3.b) Statement of Income**

	<b>06/30/2018</b>	<b>06/30/2017</b>
<b>Net Revenues</b>	<b>997,061</b>	<b>472,409</b>
Cost from sale of goods and rendering of services	(888,850)	(388,322)

<b>Gross profit</b>	<b>108,211</b>	<b>84,087</b>
Selling expenses	(24,650)	(10,521)
General and administrative expenses	(15,649)	(9,531)
Other operating expenses, net	(844)	(358)
<b>Profit before financial income (expenses)</b>	<b>67,068</b>	<b>63,677</b>
Financial income (expenses), net	(2,641)	(428)
<b>Profit (loss) before taxes</b>	<b>64,427</b>	<b>63,249</b>
Income tax and Social Contribution	(1,730)	-
<b>Profit (loss) for the period</b>	<b>62,697</b>	<b>63,249</b>

### 3.c) Statement of Cash Flows

	<b>06/30/2018</b>	<b>06/30/2017</b>
Net cash provided by (used) by operating activities	149,691	(69,216)
Net cash provided by (used) by investing activities	(6,269)	(2,492)
Net cash provided by (used) by financing activities	(176,592)	(1,860)
<b>Increase (decrease) in cash and cash equivalents for the period</b>	<b>(33,170)</b>	<b>(73,568)</b>
Cash and equivalents at the beginning of the year	33,930	112,428
<b>Cash and equivalents at the end of the year</b>	<b>760</b>	<b>38,860</b>

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**Net revenue receipts from sale of subsidiary LLC**

	<b>In 2018</b>
Net cash received from the sale of the asset	1,525,590
Cash and cash equivalents transferred on the sale of the assets	(760)
Working capital received	145,529
<b>Net cash provided by the sale of assets</b>	<b>1,670,359</b>

**4 CASH AND CASH EQUIVALENTS**

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Current</b>		
<b>Cash and cash equivalents</b>		
<b>Cash and banks</b>	<b>1,124,714</b>	<b>193,702</b>
<b>Short-term investments</b>		
<b>In Brazil:</b>		
Government securities	10,247	12,100
Private securities	609,480	644,525
	<b>619,727</b>	<b>656,625</b>
<b>Abroad:</b>		
<i>Time deposits</i>	503,563	2,561,245
<b>Total short-term investments</b>	<b>1,123,290</b>	<b>3,217,870</b>
<b>Cash and cash equivalents</b>	<b>2,248,004</b>	<b>3,411,572</b>

The funds available established in Brazil, are basically invested in repurchase agreements and Bank Certificate of Deposit (“CDBs”) and yield interest based on the floating of Certificates of Interbank Deposits (“CDI”) and government securities are basically repurchase agreements backed by National Treasury Notes. The Company invests part of the resources through the exclusive investment funds, whose financial statements have been consolidated in the Company. The funds are managed by BNY Mellon Serviços Financeiros DTVM S.A. and Caixa Econômica Federal (CEF).

The funds available abroad are invested in *time deposits* in banks considered by management as top rated banks and the returns are based on fixed interest rates

## 5 FINANCIAL INVESTMENTS

	<b>12/31/2018</b>	<b>Current 12/31/2017</b>	<b>Consolidated Non current 12/31/2018</b>
CDB - Certificate of bank deposit (1)	882,376	716,218	
Government securities (2)	13,337	19,494	
Time Deposit (3)			7,772
	<b>895,713</b>	<b>735,712</b>	<b>7,772</b>
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(1) Financial investment linked to Bank Certificate of Deposit to secure a letter of guarantee of certain loans.

(2) Investments in National Treasury Bills (LFT) managed by its exclusive funds.

(3) Investments in Time Deposit in custody to cover additional expenses of the sale of LLC.

## 6 TRADE RECEIVABLES

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Trade receivables</b>		
<b>Third parties</b>		
Domestic market	1,369,396	1,290,823
Foreign market	852,821	982,846
	<b>2,222,217</b>	<b>2,273,669</b>
Allowance for doubtful debts	(237,352)	(191,979)
	<b>1,984,865</b>	<b>2,081,690</b>
Related Parties (note 19 b)	93,317	115,388
	<b>2,078,182</b>	<b>2,197,078</b>

In accordance with Group' internal sales policy the Group performs operations relating to assignment of receivables without co-obligation in which, after assigning the customer's trade notes/bills and receiving the amounts from each transaction closed, CSN settles the trade receivables and becomes entirely free of the credit risk on the transaction. In the consolidated, this transaction totals R\$46,210 as of December 31, 2018 (R\$186,827 as of December 31, 2017).

The breakdown of gross trade receivables from third parties is as follows:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
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Current	1,514,847	1,391,839
Past-due up to 30 days	177,287	167,760
Past-due up to 180 days	47,684	142,346
Past-due over 180 days	482,399	571,724
	<b>2,222,217</b>	<b>2,273,669</b>

The movements in the Group's allowance for doubtful debts are as follows

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Opening balance</b>	<b>(191,979)</b>	<b>(172,782)</b>
Expected credit losses	(53,706)	(36,697)
Recovery of receivables	8,333	17,500
<b>Closing balance</b>	<b>(237,352)</b>	<b>(191,979)</b>

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With the adoption of IFRS 9 - Financial Instruments, the Company changed the model as from January 1, 2018 from "losses incurred" to "expected credit losses", where it began to constitute the impairment from the date of recognition of the assets (accounts receivable to expire). The application of IFRS 9 did not bring material impacts to the Company.

## 7 INVENTORIES

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
Finished goods	1,362,981	1,308,802
Work in progress	1,122,933	1,135,589
Raw materials	1,560,499	1,050,588
Spare parts	856,097	814,725
Iron ore	258,612	278,041
Advances to suppliers	36,192	12,514
(-) Provision for losses	(157,754)	(135,840)
	<b>5,039,560</b>	<b>4,464,419</b>

The movements in the provision for inventory losses are as follows:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Opening balance</b>	<b>(135,840)</b>	<b>(101,176)</b>
(Estimated losses) / Reversal of inventories with low turnover and obsolescence	(21,914)	(34,664)
<b>Closing balance</b>	<b>(157,754)</b>	<b>(135,840)</b>

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**8 OTHER CURRENT AND NON-CURRENT ASSETS**

The group of other current and non-current assets is comprised as follows:

	<b>Current</b>		<b>Consolidated Non-current</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
Judicial deposits (note 17)			347,950	339,351
Credits with the PGFN (1)			46,774	46,774
Recoverable taxes (2)	1,412,335	866,986	1,822,388	401,071
Prepaid expenses	49,830	50,078	49,808	30,741
Actuarial assets - related parties (Note 19 b)			99,894	111,281
Derivative financial instruments (note 13 I)	351			
Securities held for trading (note 13 I)	4,503	2,952		
Iron ore inventory (3)			144,499	144,499
Northeast Investment Fund – FINOR			26,598	26,598
Loans with related parties (notes 19 b and 13 I)	2,675	2,441	706,605	554,694
Other receivables from related parties (Note 19 b)	3,649	3,577	218,840	30,770
Other receivables (note 13 I)			7,451	20,024
Principal and monetary adjustment related to the Eletrobrás' compulsory loan (Note 13 I) (4)			813,428	784,741
Dividends receivable (note 19b) (*)	46,171	41,528		
Employee debt (*)	31,645	33,942		
Sea freight (5)	117,156			
Other receivables (*)	12,753	3,667		
Others	71,956	67,544	988	37,931
	<b>1,753,024</b>	<b>1,072,715</b>	<b>4,285,223</b>	<b>2,528,475</b>

(\*) In December 2018, the Company reclassified the balances from 2017 related to Dividends receivable, Employee Debts and Other Receivables to Other Current and Non-Current Assets. Previously, the amounts were presented in the note 'Accounts Receivable'.

(1) Refers to the excess of judicial deposit originated by the 2009 REFIS (Tax Debt Refinancing Program).

(2) Refers mainly to PIS / COFINS, ICMS recoverable and income and social contribution taxes to be offset. On September 20, 2018, res judicata the writ of mandamus and special appeal filed in 2006, in which CSN and Federal Union were parties, related to the discussion about the non-inclusion of ICMS in the calculation base of PIS and COFINS, confirmed the CSN's right to offset the amounts unduly paid under these taxes from 2001 to 2013. In this way, the Company recognized in 2018 the amount of R\$ 2,208,462, under "Taxes recoverable", being in the current assets R\$ 793,516 and in the noncurrent R\$ 1,414,945 and in the "Other Operating" account, was recognized the amount of R\$ 1,102,365, see note 24, and R\$ 1,106,097 as "Financial Result", see note 25.

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(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.

(4) This is a certain and due amount, arising from the res judicata favorable decision to the Company, which is irreversible and irrevocable, in order to apply the STJ's consolidated position on the subject, which culminated in the conviction of Eletrobrás to the payment of the correct interest and monetary adjustment of the Compulsory Loan. The res judicata decision, as well as the certainty about the amounts involved in the liquidation of the sentence (judicial procedure to request the satisfaction of the right), allowed the conclusion that the entry of this value is certain.

(5) Refers to payment of freight expenses and marine insurance on unrecognized sales revenues, following the guidelines of IFRS15, the freight in incoterms "CIF" is considered a distinct performance obligation and for these, there's no conclusion about the delivery process in December 31, 2018, but the transport service provider had already been paid.

## **9 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.

### **9.a) Investments in joint ventures, joint operations, associates and other investments**

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Companies	Number of shares (in units)	% equity interest	Participation in			Fair Value Allocation	12/31/
			Assets	Liabilities	Shareholders' equity		N
<b>Joint-venture and Joint-operation</b>							
MRS Logística S.A. (*)	126,716,070	37.27	3,125,912	1,693,200	1,878,095		19
CBSI - Companhia Brasileira de Serviços de Infraestrutura	1,876,146	50.00	25,941	19,997	5,944		4
Transnordestina Logística S.A.	24,168,304	46.30	4,065,604	2,883,851	1,181,753	271,116	(20
			<b>7,217,457</b>	<b>4,597,048</b>	<b>3,065,792</b>	<b>271,116</b>	<b>17</b>
<b>Associates</b>							
Arvedi Metalfer do Brasil	46,994,971	20.00	40,712	26,308	14,404		(5
			<b>40,712</b>	<b>26,308</b>	<b>14,404</b>		<b>(5</b>
<b>Classified as fair value through profit or loss and comprehensive income (Note 13 I)</b>							
Usiminas					2,250,623		
Panatlântica					28,566		
					<b>2,279,189</b>		
<b>Other Investments</b>							
						<b>112</b>	
<b>Total Investments</b>							
					<b>5,359,497</b>	<b>271,116</b>	
						<b>5,630,613</b>	

(\*) On December 31, 2018 and 2017, the Company directly owned 26,611,282 common shares, 2,673,312 Class A preferred shares and 34,092,604 Class B preferred shares, totaling 36,765,916 preferred shares and indirectly through its subsidiary CSN Mineração 25,802,872 common shares, 37,536,000 Class A preferred shares of MRS Logística S.A.;

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.

**9.b) Changes of investments balances in joint ventures, joint operations, associates and other investments**

	<b>Consolidated</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Opening balance of investments</b>	<b>5,499,995</b>	<b>4,568,451</b>
<b>Opening balance of loss provisions</b>		
Capital increase		20,579
Dividends	(87,846)	(79,189)
Comprehensive income (1)	272	850,640
Equity in results of affiliated companies (2)	173,145	147,800
Receipt of sale - Usiminas' shares	(39,377)	
Update of shares measured at Fair Value through profit or loss (VJR) (note 13 II)	96,133	
Amortization of fair value – investment in MRS	(11,746)	(11,746)
Others	37	3,460
<b>Closing balance of investments</b>	<b>5,630,613</b>	<b>5,499,995</b>

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(1) Refers to the marked-to-market of investments classified at fair value through profit or loss, translation to the reporting currency of the foreign investments of which functional currency is not the Brazilian Reais, actuarial gain/loss and gain/loss on net investment hedge from investments measured by equity method.

(2) The table below shows 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

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Equity in results of affiliated companies</b>		
MRS Logística S.A.	194,403	171,905
CBSI - Companhia Brasileira de Serviços de Infraestrutura	4,501	1,785
Transnordestina Logística S.A.	(20,429)	(21,357)
Arvedi Metalfer do Brasil S.A.	(5,087)	(4,368)
Others	(243)	(165)
	<b>173,145</b>	<b>147,800</b>
<b>Eliminations</b>		
To cost of sales	(42,806)	(40,823)
To taxes	14,554	13,880
<b>Others</b>		
Amortization of fair value – investment in MRS	(11,746)	(11,746)
Others	2,559	
<b>Equity in results adjusted</b>	<b>135,706</b>	<b>109,111</b>

### 9.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.

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Tecon won a bidding procedure and entered into the lease agreement in October 23, 1998 for operation of the port terminal for a period of 25 years, extendable for an equal period.

Upon termination of the lease, 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.

*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 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 spun-off portion of Transnordestina Logística S.A, the Company holds the concession to operate the railway cargo transportation, the public service is provided in northeastern Brazil, which includes the railway between the towns of Sao Luis to Mucuripe, Arrojado to Recife, Itabaiana to Cabedelo, Paula Cavalcante to Macau and Propriá to Jorge Lins ("Network I").

As of May 2018, the CSN subscribed shares by capitalization of advances for future capital increase amounting R\$ 33,633, therefore its participation in the share capital of the company increased from 90.78% to 91.69%. 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\$(104) recorded in shareholders' equity in other comprehensive income.

- CSN MINERAÇÃO S.A. ("CSN Mineração")

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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 November 30, 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.

#### 9.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:

Equity interest (%)	MRS Logística 34.94%	Joint-Venture		12/31/2018		Joint-Venture		
		CBSI 50.00%	Transnordestina Logística 46.30%	Joint-Operation	Itá Energética 48.75%	MRS Logística 34.94%	CBSI 50.00%	Transnordestina Logística 46.30%
<b>Balance sheet</b>								
<b>Current assets</b>								
Cash and cash equivalents	345,962	2,091	19,234	29,870	484,978	101	5,700	5,700
Advances to suppliers	17,750	73	1,734	937	14,911	37		
Other current assets	736,768	41,284	108,851	16,718	685,311	28,475	49,400	49,400
<b>Total current assets</b>	<b>1,100,480</b>	<b>43,448</b>	<b>129,819</b>	<b>47,525</b>	<b>1,185,200</b>	<b>28,613</b>	<b>55,200</b>	<b>55,200</b>

<b>Non-current assets</b>								
Other non-current assets	804,570	2,111	222,630	25,840	693,434	974	238,000	
Investments, PP&E and intangible assets	6,482,292	6,324	8,428,567	457,578	6,277,550	2,423	7,927,800	
<b>Total non-current assets</b>	<b>7,286,862</b>	<b>8,435</b>	<b>8,651,197</b>	<b>483,418</b>	<b>6,970,984</b>	<b>3,397</b>	<b>8,165,800</b>	
<b>Total Assets</b>	<b>8,387,342</b>	<b>51,883</b>	<b>8,781,016</b>	<b>530,943</b>	<b>8,156,184</b>	<b>32,010</b>	<b>8,221,100</b>	
<b>Current liabilities</b>								
Borrowings and financing	422,793	4,350.0000	75,906		668,947	1,411	52,600	
Other current liabilities	1,368,290	33,844	179,816	18,298	1,272,365	25,898	113,700	
<b>Total current liabilities</b>	<b>1,791,083</b>	<b>38,194</b>	<b>255,722</b>	<b>18,298</b>	<b>1,941,312</b>	<b>27,309</b>	<b>166,300</b>	
<b>Non-current liabilities</b>								
Borrowings and financing	2,111,518	1,262	5,754,073		2,084,422		5,457,700	
Other non-current liabilities	640,535	539	218,839	15,113	575,170		400,000	
<b>Total non-current liabilities</b>	<b>2,752,053</b>	<b>1,801</b>	<b>5,972,912</b>	<b>15,113</b>	<b>2,659,592</b>		<b>5,458,200</b>	
<b>Shareholders' equity</b>	<b>3,844,206</b>	<b>11,888</b>	<b>2,552,382</b>	<b>497,532</b>	<b>3,555,280</b>	<b>4,701</b>	<b>2,596,500</b>	
<b>Total liabilities and shareholders' equity</b>	<b>8,387,342</b>	<b>51,883</b>	<b>8,781,016</b>	<b>530,943</b>	<b>8,156,184</b>	<b>32,010</b>	<b>8,221,100</b>	

Equity interest (%)	01/01/2018 at 12/31/2018				MRS Logística	01/01/2018		
	MRS Logística	Joint-Venture CBSI	Transnordestina Logística	Joint-Operation Itá Energética		Joint-Venture CBSI	Transnordestina Logística	Joint-Operation Itá Energética
	34.94%	50.00%	46.30%	48.75%	34.94%	50.00%	46.30%	

**Statements  
of Income**

Net revenue	3,726,448	166,080		166,358	3,492,805	135,399	
Cost of sales and services	(2,476,628)	(142,254)		(77,829)	(2,307,108)	(120,647)	
Gross profit	1,249,820	23,826		88,529	1,185,697	14,752	
Operating (expenses) income	(313,606)	(10,884)	(18,020)	(60,104)	(283,151)	(8,340)	(32,245)
Financial income (expenses), net	(151,839)	(179)	(26,103)	(126)	(187,295)	(1,004)	(13,938)
Income before income tax and social contribution	784,375	12,763	(44,123)	28,299	715,251	5,408	(46,183)
Current and deferred income tax and social contribution	(262,760)	(3,761)		(9,452)	(254,001)	(1,838)	
<b>(Loss) profit for the year, net</b>	<b>521,615</b>	<b>9,002</b>	<b>(44,123)</b>	<b>18,847</b>	<b>461,250</b>	<b>3,570</b>	<b>(46,183)</b>

- ITÁ ENERGÉTICA S.A. - ("ITASA")

ITASA is a corporation established in July 1996 that was engaged to operate under a 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. The UHE Itá concession is shared with ENGIE Brasil Energia S.A., with CSN holding 48.75%.

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- 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, 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%.

- CONSÓRCIO DA USINA HIDRELÉTRICA DE 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, 2018 is R\$23,596 (R\$24,759 as of December 31, 2017) and the expense in 2018 amounted to R\$5,827 (R\$5,966 in 2017).

- CBSI - COMPANHIA BRASILEIRA DE SERVIÇOS DE INFRAESTRUTURA (“CBSI”)

CBSI is the result of a joint venture between CSN and CKTR Brasil Ltda. Based in the city of Araucária, PR, CBSI is primarily engaged in providing services to 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. CSN holds a 50% interest.

- 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 will 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 discussion with the responsible bodies, according described in the item 28.c. The Management of TLSA understands that new deadlines for project completion will not have material adverse effects on the expected return on investment.

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 other comprehensive income.

The Management receives funds from its shareholders and third parties for completion of the works, according described in the item 28.c, 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, 2018.

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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:

<b>Cash Flow Projection</b>	<b>Until 2057</b>
Gross Margin	Based on market studies to capture operations costs and loads, based on studies of market trends.
Estimated Costs	Costs based on studies and market trends.
Growth rate in perpetuity	Growth rate was not considered due to the projection model until the end of the concession.
Discount rate	Between 5.1% to 7.9% in real terms.

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.

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 fator to the model.



As a result, it was not necessary to recognize an impairment in the surplus-value of the investments in the year ended on December 31, 2018.

**9.e) Additional information on indirect participation in abroad 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.

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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”)

Incorporated in 2001 with the assets and liabilities from the extinct Heartland Steel Inc., CSN LLC has an industrial plant in Terre Haute, Indiana State - USA, where the cold rolled and galvanized steel production lines are located, 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.

On June 5, 2018 CSN LLC had its corporate name changed to "Heartland Steel Processing, LLC". On the same date, a new company was incorporated under the name "Companhia Siderúrgica Nacional, LLC", a wholly owned subsidiary of Heartland Steel Processing, LLC. On June 28, 2018, Companhia Siderúrgica Nacional, LLC., became a wholly-owned subsidiary of CSN Steel and, on June 29, 2018, Heartland Steel Processing, LLC was sold to Steel Dynamics, Inc for the base transaction price of R\$400million.

The new "Companhia Siderúrgica Nacional, LLC" imports and comercializes steel products and maintains its activities in the United States.

- 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.

## **9.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 fair value through profit or loss, recognizing changes in fair value in profit or loss.

The Company currently holds 11.31% (11.33% as of December 31, 2017) 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 in Espírito Santo, all centers are located in strategic locations for the shipment of its production.

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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 February 2018, were sold 3,136,100 of preferred shares (USIM5) in the amount of R\$ 39,377, by the exclusive fund “VR1 - Multi-Credit Private Investment Fund.

As of December 31, 2018 and 2017, the Company’s interest in Usiminas’s capital was 15.19% in common shares and 20.29% (20.86% as of December 31,2017) 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, 2018 and 2017 CSN held 20.00% of Arvedi’s share capital.

## 10 PROPERTY, PLANT AND EQUIPMENT

						<b>Consolidated</b>
<b>Land</b>	<b>Buildings and</b>	<b>Machinery,</b>	<b>Furniture</b>	<b>Construction</b>	<b>Other (*)</b>	<b>Total</b>
	<b>Infrastructure</b>	<b>equipment</b>	<b>and</b>	<b>in progress</b>		

			<b>and facilities</b>	<b>fixtures</b>			
<b>Balance at December 31, 2017</b>	<b>279,740</b>	<b>2,796,947</b>	<b>11,985,920</b>	<b>33,103</b>	<b>2,475,935</b>	<b>393,194</b>	<b>17,964,839</b>
Cost	279,740	3,819,929	21,674,362	164,152	2,475,935	669,096	29,083,214
Accumulated depreciation		(1,022,982)	(9,688,442)	(131,049)		(275,902)	(11,118,375)
<b>Balance at December 31, 2017</b>	<b>279,740</b>	<b>2,796,947</b>	<b>11,985,920</b>	<b>33,103</b>	<b>2,475,935</b>	<b>393,194</b>	<b>17,964,839</b>
Translation adjustment	7,730	11,653	86,553	543	4,275	4,605	115,359
Acquisitions	622	1,259	144,499	1,574	1,158,788	21,152	1,327,894
Capitalized interest (notes 25 and 30)					71,611		71,611
Write-off and estimated losses, net of reversal (note 24)		(9,768)	(21,468)	(6)	(4,348)	(2,655)	(38,245)
Depreciation (note 23)		(134,534)	(1,043,188)	(5,394)		(22,456)	(1,205,572)
Transfers to other asset categories		30,031	685,005	891	(424,443)	(291,484)	
Write-off - sale of subsidiary LLC	(238)	(16,950)	(145,958)	(181)	(6,070)	(21,829)	(191,226)
Transfers to intangible assets			5,559		(1,752)		3,807
Others			(9,651)		8,440	(392)	(1,603)
<b>Balance as of December 31, 2018</b>	<b>287,854</b>	<b>2,678,638</b>	<b>11,687,271</b>	<b>30,530</b>	<b>3,282,436</b>	<b>80,135</b>	<b>18,046,864</b>
Cost	287,854	3,751,429	22,426,782	165,331	3,282,436	355,768	30,269,600
Accumulated depreciation		(1,072,791)	(10,739,511)	(134,801)		(275,633)	(12,222,736)
<b>Balance as of December 31, 2018</b>	<b>287,854</b>	<b>2,678,638</b>	<b>11,687,271</b>	<b>30,530</b>	<b>3,282,436</b>	<b>80,135</b>	<b>18,046,864</b>

(\* ) Refer basically to railway assets such as courtyards, tracks and leasehold improvements, vehicles, hardware, mines, ore deposits, and spare part inventories.

The breakdown of the projects comprising construction in progress is as follows:

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					<b>Consolidated</b>	
	<b>Project description</b>	<b>Start date</b>	<b>Completion date</b>		<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Logistics</b>	Current investments for maintenance of current operations.				89,595	106,956
					<b>89,595</b>	<b>106,956</b>
<b>Mining</b>	Expansion of Casa de Pedra Mine capacity production.	2007	2020	(1)	844,194	750,999
	Expansion of TECAR export capacity.	2009	2022	(2)	289,298	275,811
	Current investments for maintenance of current operations.				725,616	408,522
					<b>1,859,108</b>	<b>1,435,332</b>
<b>Steel</b>	Supply of 16 torpedo's cars for operation in the steel industry	2008	2020		94,920	99,483
	Current investments for maintenance of current operations.			(3)	558,922	228,029
					<b>653,842</b>	<b>327,512</b>
<b>Cement</b>	Construction of cement plants.	2011	2023	(4)	585,163	554,865
	Current investments for maintenance of current operations.				94,728	51,270
					<b>679,891</b>	<b>606,135</b>
<b>Construction in progress</b>					<b>3,282,436</b>	<b>2,475,935</b>

(1) Estimated completion date of the Central Plant Step 1;

(2) Estimated completion date of phase 60 Mtpa;

(3) Refers substantially to the technological modernization of the UPV's continuous running machines;

(4) Refers substantially to the acquisition of new Integrated Cement Plants

The average estimated useful lives are as follows, in years:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
Buildings	38	39
Machinery, equipment and facilities	22	21
Furniture and fixtures	11	12
Others	15	17

### 10.a) Capitalized Interest

As of December 31, 2018, the Company capitalized borrowing costs amounting to R\$71,611 in consolidated (as of December 31, 2017, R\$91,957 in consolidated). These costs are basically estimated for the mining projects, mainly relating to the expansion of Casa de Pedra (MG) and TECAR (RJ), see notes 25 and 30.

The rates used to capitalize borrowing costs are as follows:

	<b>Rates</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
Unspecified projects		6.31%	8.63%

## 11 INTANGIBLE ASSETS

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							Consolidated
	Goodwill	Customer relationships	Software	Trademarks and patents	Rights and licenses (*)	Others	Total
<b>Balance at December 31, 2017</b>	<b>3,590,931</b>	<b>300,875</b>	<b>73,185</b>	<b>134,137</b>	<b>3,172,469</b>	<b>449</b>	<b>7,272,046</b>
Cost	3,834,234	513,068	167,162	134,137	3,185,701	449	7,834,751
Accumulated amortization	(133,973)	(212,193)	(93,977)		(13,232)		(453,375)
Adjustment for accumulated recoverable value	(109,330)						(109,330)
<b>Balance at December 31, 2017</b>	<b>3,590,931</b>	<b>300,875</b>	<b>73,185</b>	<b>134,137</b>	<b>3,172,469</b>	<b>449</b>	<b>7,272,046</b>
Translation adjustment		34,107	148	15,872		58	50,185
Acquisitions and expenditures			1,216			984	2,200
Transfer of property, plant and equipment			(3,807)				(3,807)
Amortization (note 23)		(46,209)	(15,770)		(5,470)		(67,449)
<b>Balance as of December 31, 2018</b>	<b>3,590,931</b>	<b>288,773</b>	<b>54,972</b>	<b>150,009</b>	<b>3,166,999</b>	<b>1,491</b>	<b>7,253,175</b>
Cost	3,831,338	573,614	161,067	150,009	3,185,701	1,491	7,903,220
Accumulated amortization	(131,077)	(284,841)	(106,095)		(18,702)		(540,715)
Adjustment for accumulated recoverable value	(109,330)						(109,330)
<b>Balance as of December 31, 2018</b>	<b>3,590,931</b>	<b>288,773</b>	<b>54,972</b>	<b>150,009</b>	<b>3,166,999</b>	<b>1,491</b>	<b>7,253,175</b>

(\*) Composed mainly by mineral rights with estimated resources of 1,101 million tons (Unaudited by independent auditors). Corresponding amortization is recorded based on production volumes.

The average useful lives by nature are as follows, in years:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
Software	7	8
Customer relationships	13	13

### 11.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. According to IAS36, 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:

Cash generating unity	Segment	Consolidated Goodwill		Trademarks		Total	
		12/31/2018	12/31/2017	12/31/2018	12/31/2017	12/31/2018	12/31/2017
Packaging (1)	Steel	158,748	158,748			<b>158,748</b>	<b>158,748</b>
Long Stel (2)	Steel	235,595	235,595	150,009	134,137	<b>385,604</b>	<b>369,732</b>
Minning (3)	Mining	3,196,588	3,196,588			<b>3,196,588</b>	<b>3,196,588</b>
		<b>3,590,931</b>	<b>3,590,931</b>	<b>150,009</b>	<b>134,137</b>	<b>3,740,940</b>	<b>3,725,068</b>

(1) The goodwill of the Packaging cash-generating unit is shown net of impairment loss in the amount of R\$109,330, recognized in 2011.

(2) 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.

(3) Refers to the goodwill based on expectations for future profitability, resulting from the acquisition of Namisa by CSN Mineração.

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, 2018 are as follows:

<b>Measurement of recoverable value</b>	<b>Metal packaging</b>	<b>Flat steel (*)</b>	<b>Logistic (**)</b>	<b>Mining</b>
<b>Cash flow projection</b>	Discounted Cash Flow Until 2028 + perpetuity	Discounted Cash Flow Until 2028 + perpetuity	Discounted Cash Flow Until 2027	Discounted Cash Flow Until 2054
<b>Gross Margin</b>	Gross margin updated based on historical data, impacts of business restructuring and market trends	Gross margin updated based on historical data and market trends.	Estimated based on market studies for cargo captures and operational costs according market trends.	Reflects projection of costs due to the progress of the mining plan as well as startup and ramp up of projects . Price and exchange rate projected according industry reports.
<b>Cost atualization</b>	Cost based on historical data of each product and impacts of business restructuring	Updated costs based on historical data and market trends	Costs based on historical data and market trends	Updated costs based on historical data, progress of mining plan as well as startup and ramp up of projects
<b>Growth Rate</b>	Growth of 1.5% p.a in real terms updated by long term inflation of 4.0% p.a.	Growth of 1.4% p.a in real terms updated by long term inflation of 2.5% p.a. of the Euro zone	Growth of 1.5% p.a in real terms	Without growth in real terms updated only by long term inflation of 4.0% p.a.
<b>Discount rate</b>	For Metal packaging, flat steel and mining, these cash flows were considered using a discount rate after taxes between 5% and 13% p.a. in nominal terms. For the logistics segment, cash flows were discounted using a discount rate between 5.41% and 6.41% p.a. 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 Lusosider, located in Portugal. The discount rate was applied on the discounted cash flow prepared in Euros, the functional currency of this subsidiary.

(\*\*) Refer to assets of subsidiary FTL – Ferrovias Transnordestina Logística S.A.

For the subsidiary SWT, the measurement of recoverable value was based on fair value and classified as Level 3, based on unobservable inputs that reflect the assumptions that market participants would use for pricing, including risk assumptions and discount rate.

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, 2018.

## **12 BORROWINGS, FINANCING AND DEBENTURES**

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The balances of borrowings, financing and debentures, which are carried at amortized cost, are as follows:

	<b>Current liabilities</b>		<b>Consolidated Non-current liabilities</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Debt agreements in the international market</b>				
<b>Variable interest in:</b>				
<b>US\$</b>				
Prepayment (1)	1,016,737	791,163	3,830,240	4,097,509
<b>Fixed interest in:</b>				
<b>US\$</b>				
Bonds, Perpetual Bonds and ACC (2)	2,490,178	523,509	8,613,491	8,920,342
Intercompany				
<b>EUR</b>				
Others	181,056	251,630	106,535	197,131
	<b>3,687,971</b>	<b>1,566,302</b>	<b>12,550,266</b>	<b>13,214,982</b>
<b>Debt agreements in Brazil</b>				
<b>Securities with variable interest in:</b>				
<b>R\$</b>				
BNDES/FINAME, Debentures, (3) NCE and CCB	1,890,450	4,982,159	10,710,678	9,702,972
<b>Securities with fixed interest in:</b>				
<b>R\$</b>				
Prepayment	103,376	3,303		100,000
	<b>1,993,826</b>	<b>4,985,462</b>	<b>10,710,678</b>	<b>9,802,972</b>
<b>Total Borrowings and Financing</b>	<b>5,681,797</b>	<b>6,551,764</b>	<b>23,260,944</b>	<b>23,017,954</b>
Transaction Costs and Issue Premiums	(28,358)	(24,862)	(87,309)	(34,012)
<b>Total Borrowings and Financing + Transaction Costs</b>	<b>5,653,439</b>	<b>6,526,902</b>	<b>23,173,635</b>	<b>22,983,942</b>

(1) In November 2018, the Company concluded the negotiation of its debt of R\$250 million with Banco Santander, related to Prepayment, rescheduling the maturities from 2019 to 2022.

(2) In February 2018, the Company issued debt securities in the foreign market ("Notes"), through its subsidiary CSN Resources SA, in the amount of US\$ 350 million, maturing in 2023 and interest of 7.625% per annum. In parallel, a tender offer ("Tender Offer") of the Notes was issued by CSN Islands XI Corp. and CSN Resources S.A., subsidiaries of the Company, having repurchased US\$ 350 million with expected maturity for 2019 and 2020. The Notes are unconditionally and irrevocably guaranteed by the Company.

(3) In February 2018, the Company concluded the renegotiation of its debt of R\$4.9 billion with Banco do Brasil SA ("BB"), related to its own issues of Export Credit Notes plus the issues made by its subsidiary CSN Mineração, moving the maturities from 2018 to 2022 to maturity until December 2024, with a guarantee of part of the shares of Usiminas, owned by the Company.

In August 2018, the Company concluded the negotiations to reprofile its debts of R\$ 6.8 billion with Caixa Econômica Federal, referring to the Bank Credit Note, rescheduling the maturities throughout 2018 to 2023 to maturity up to 2024, with guarantee of shares of Usiminas shares owned by the Company.

The following table shows the average interest rate:

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		<b>Consolidated</b>	<b>12/31/2018</b>
	<b>Average interest rate (*)</b>		<b>Total debt</b>
US\$	5.88%		15,950,646
R\$	8.19%		12,704,504
EUR	3.88%		287,591
			<b>28,942,741</b>

(\*) In order to determine the average interest rates for debt contracts with floating rates, the Company used the rates applied as of December 31, 2018.

#### **12.a) Maturities of borrowings, financing and debentures presented in non-current liabilities**

As of December 31, 2018, the breakdown of principal plus interest of long-term liabilities as borrowings, financing and debentures by maturity date is presented as follows:

	<b>Bank loans</b>	<b>Capital markets</b>	<b>Development agencies</b>	<b>Consolidated 12/31/2018 Principal Total</b>
2020	3,187,269	3,499,177	66,892	6,753,338
2021	3,263,810	116,003	59,455	3,439,268
2022	3,087,732	36,667	58,154	3,182,553
2023	2,669,211	1,356,180	56,985	4,082,376
2024	1,276,001		67,734	1,343,735
After 2024			584,874	584,874
Perpetual bonds		3,874,800		3,874,800
	<b>13,484,023</b>	<b>8,882,827</b>	<b>894,094</b>	<b>23,260,944</b>

#### **12.b) Amortization and borrowings raised, financing and debentures**

The table below presents the funding raised and amortizations during the year:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Opening balance</b>	<b>29,510,844</b>	<b>30,441,018</b>
Funding raised	2,154,471	538,771
Principal repayments	(5,019,978)	(1,528,023)
Payments of charges	(2,141,710)	(2,634,931)
Provision of charges	2,009,688	2,438,555
Write-off – sale of subsidiary LLC	(10,544)	
Others (1)	2,324,303	255,454
<b>Closing balance</b>	<b>28,827,074</b>	<b>29,510,844</b>

(1) Includes unrealized monetary and foreign exchange variations.

In 2018, the Group obtained and amortized loans as shown below:

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- Funding raised and amortizations:**

Nature	Raised	Amortization of principal	Consolidated
			12/31/2018 Amortization of charges
Prepayment		849,654	280,923
Bonds, Perpetual bonds and ACC	1,749,099	1,632,464	675,370
BNDES/FINAME, Debentures, NCE and CCB	10,792	1,948,014	1,173,380
Others	394,580	589,846	12,037
	<b>2,154,471</b>	<b>5,019,978</b>	<b>2,141,710</b>

- 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. The Company is in compliance with the financial and non-financial obligations (covenants) of its current contracts, not considered any non-compliances already remedied or that have not generated the acceleration of debts or any type of accounting provision.

On December 31, 2018, the Company has provisioned R\$ 38,134 in the Consolidated (R\$ 30,843 as of December 31, 2017) for risk assumption.

### 12.c) GUARANTEES

The Company is liable for guarantees of its subsidiaries and joint ventures as follows:

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	Currency	Maturities	Borrowings		Tax forec
			12/31/2018	12/31/2017	12/31/2018 1
Transnordestina Logística	R\$	Until 09/19/2056 and Indefinite	2,108,917	2,541,347	35,336
FTL - Ferrovia Transnordestina	R\$	11/15/2020	62,407	69,405	
Sepetiba Tecon					
Cia Metalurgica Prada	R\$	Indefinite			333
CSN Energia	R\$	Until 11/26/2023 and Indefinite			2,829
CSN Mineração	R\$	Until 12/26/2024	1,407,363	2,000,000	
Estanho de Rondônia	R\$	07/15/2022	3,153	3,153	
Minérios Nacional S.A.	R\$	Until 09/10/2021	7,305		
<b>Total in R\$</b>			<b>3,589,145</b>	<b>4,613,905</b>	<b>38,498</b>
CSN Islands XI	US\$	09/21/2019	547,094	750,000	
CSN Islands XII	US\$	Perpetual	1,000,000	1,000,000	
CSN Resources	US\$	Until 02/13/2023	1,402,906	1,200,000	
<b>Total in US\$</b>			<b>2,950,000</b>	<b>2,950,000</b>	
CSN Steel S.L.	EUR	1/31/2020	48,000	120,000	
Lusosider Aços Planos	EUR	Indefinite	75,000	25,000	
<b>Total in EUR</b>			<b>123,000</b>	<b>145,000</b>	
<b>Total in R\$</b>			<b>11,976,657</b>	<b>10,334,149</b>	
			<b>15,565,802</b>	<b>14,948,054</b>	<b>38,498</b>

### 13 FINANCIAL INSTRUMENTS

#### I - Identification and measurement of financial instruments

##### 3.c) Statement of Cash Flows

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 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**

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With the implementation of pronouncements IFRS 9, the classification of financial instruments: held to maturity, loans and receivables and available for sale were replaced by three categories of classification and measurement of financial instruments: amortized cost, fair value through other comprehensive income (VJORA) and fair value through profit or loss (VJR).

	<b>Disclosed on 12/31/2017</b>	<b>Applied on 01/01/2018</b>	<b>Consolidated Balance at 12/31/2017</b>
<b>Assets</b>			
<b>Current</b>			
Cash and cash equivalents	Loans and Receivables	Amortized cost	3,411,572
Short term investments	Loans and Receivables	Amortized cost	735,712
Accounts Receivable Net	Loans and Receivables	Amortized cost	2,197,078
Loans with related parties	Loans and Receivables	Amortized cost	2,441
Derivative financial instruments	VJR	VJR	
Trading securities	VJR	VJR	2,952
Dividends receivable	Amortized cost	Amortized cost	41,528
<b>Non-current</b>			
Loans with related parties	Loans and Receivables	Amortized cost	554,694
Other trade receivables	Loans and Receivables	Amortized cost	20,024
Investments	Available for sale	VJR	2,222,479
<b>Liabilities</b>			
<b>Current</b>			
<b>Borrowings and financing</b>			
Derivative financial instruments	VJR	VJR	
Trade payables	Amortized cost	Amortized cost	2,460,774
Dividends and interest on capital	Amortized cost	Amortized cost	510,692
Non-current	Amortized cost	Amortized cost	23,017,953

**Borrowings and  
financing**

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			12/31/2018		Consolidated		
	Notes	Fair value through profit or loss	Measured at amortized cost	Balances	Fair value through profit or loss	Measured at amortized cost	Balances
							12/31/2017
<b>Assets</b>							
<b>Current</b>							
Cash and cash equivalents	4		2,248,004	2,248,004		3,411,572	3,411,572
Financial investments	5		895,713	895,713		735,712	735,712
Trade receivables	6		2,078,182	2,078,182		2,197,078	2,197,078
Dividends receivable	8		46,171	46,171		41,528	41,528
Derivative financial instruments	8	351		351			
Trading securities	8	4,503		4,503	2,952		2,952
Loans - related parties	8		2,675	2,675		2,441	2,441
<b>Total</b>		<b>4,854</b>	<b>5,270,745</b>	<b>5,275,599</b>	<b>2,952</b>	<b>6,388,331</b>	<b>6,391,283</b>
<b>Non-current</b>							
Financial investments	5		7,772	7,772			
Other trade receivables	8		820,879	820,879		804,765	804,765
Investments	9	2,279,189		2,279,189	2,222,433		2,222,433
Loans - related parties	8		706,605	706,605		554,694	554,694
<b>Total</b>		<b>2,279,189</b>	<b>1,535,256</b>	<b>3,814,445</b>	<b>2,222,433</b>	<b>1,359,459</b>	<b>3,581,892</b>
<b>Total Assets</b>		<b>2,284,043</b>	<b>6,806,001</b>	<b>9,090,044</b>	<b>2,225,385</b>	<b>7,747,790</b>	<b>9,973,175</b>
<b>Liabilities</b>							
<b>Current</b>							
Borrowings and financing	12		5,681,797	5,681,797		6,551,764	6,551,764
Trade payables			3,473,822	3,473,822		2,505,695	2,505,695
Dividends and interest on	14		932,005	932,005		510,692	510,692

capital

<b>Total</b>		<b>10,087,624</b>	<b>10,087,624</b>	<b>9,568,151</b>	<b>9,568,151</b>
<b>Non-current</b>					
Borrowings and financing	12	23,260,945	23,260,945	23,017,953	23,017,953
<b>Total</b>		<b>23,260,945</b>	<b>23,260,945</b>	<b>23,017,953</b>	<b>23,017,953</b>
<b>Total</b>					
<b>Liabilities</b>		<b>33,348,569</b>	<b>33,348,569</b>	<b>32,586,104</b>	<b>32,586,104</b>

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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:

<b>Consolidated</b>	<b>Level 1</b>	<b>Level 2</b>	<b>12/31/2018 Balance</b>	<b>Level 1</b>	<b>12/31/2017 Balance</b>
<b>Assets</b>					
<b>Financial assets at fair value through profit or loss</b>					
<b>Current</b>					
Derivative financial instruments		351	351		
Trading securities	4,503		4,503	2,952	2,952
<b>Non-current</b>					
Investments	2,279,189		2,279,189	2,222,433	2,222,433
<b>Total Assets</b>	<b>2,283,692</b>	<b>351</b>	<b>2,284,043</b>	<b>2,225,385</b>	<b>2,225,385</b>

**Level 1** - quoted prices 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 measured at fair value through profit or loss.**

During the application of IAS 39 until December 2017, the Company has investments in equity instruments, measured at fair value through other comprehensive income, because the nature of the investment is not included in any other categories of financial instruments (loans and receivables, held-to-maturity investments or financial assets at fair value through profit or loss).

Gains and losses arising from the variation of the share price were recorded directly in shareholders' equity under the account "Other comprehensive income" and for each significant decrease in market value an impairment loss was recognized in the statement of income.

With the implementation of the pronouncement IFRS 9 as from January 1, 2018, the equity instruments classified as held-to-maturity should be classified as fair value through profit or loss (VJR). In this way, the Company reclassified the investments in common (USIM3) and preferred (USIM5) shares of Usiminas ("Usiminas Shares"), from fair value through other comprehensive income (VJORA) to fair value through profit or loss. In relation to Panatlântica shares (PAT13), currently classified as (VJORA), the Company based on its current business model, whose objective is to maintain this financial asset to obtain contractual cash flows, but adopts the option to reclassify it to VJR, recognizing changes in fair value in profit or loss.

Accordingly, the credit balance accumulated in December 2017 in other comprehensive income of R\$1,559,682 was reclassified to the statement of income from the effective date of the new standard. With the new classification, changes in fair value are recorded in the statement of income, whose movement occurred until December 31, 2018 generated a gain of R\$ 96,133 and a cumulated gain of R\$ 1,655,813 (See opening below and note 24).

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Class of shares	12/31/2018			Sale of shares			12/31/2017			Fair Value Adjustments Recognized in profit or loss
	Quantity	Share price	Closing Balance	Quantity	Share price	Cash Received	Quantity	Share price	Closing Balance	
USIM3	107,156,651	11.44	1,225,872				107,156,651	10.83	1,160,506	65,
USIM5	111,144,456	9.22	1,024,752	3,136,100	12.56	39,377	114,280,556	9.10	1,039,953	24,
PAT13	1,997,642	14.30	28,565				1,997,642	11.00	21,974	6,
	<b>220,298,749</b>		<b>2,279,189</b>	<b>3,136,100</b>		<b>39,377</b>	<b>223,434,849</b>		<b>2,222,433</b>	<b>96,</b>

As of December 31, 2018 and 2017, the Company's interest in Usiminas's capital was 15.19% in common shares and 20.29% (20.86% as of December 31, 2017) in preferred shares.

In February 2018, 3,136,100 preferred shares (USIM5) were sold, totaling R\$39,377 through the exclusive fund "VR1 - Multimarket Private Investment Fund".

- **Share market price risks**

The Company is exposed to the risk of changes in the price of the shares due to the investments, valued at fair value through profit or loss and other comprehensive income that have their prices based on the market price on the stock exchange (B3).

### 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 quality of counterparties' hedging instruments and the credit limit 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 associate to any speculative deals or short sales.

### **13.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 substantially the Real **that** is called natural currency exposure. Net exposure is the result of offsetting the natural currency exposure by hedging instruments adopted by CSN.

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The consolidated net exposure as of December 31, 2018 is as follows:

<b>Foreign Exchange Exposure</b>	<b>(Amounts in US\$'000)</b>	<b>12/31/2018 (Amounts in €'000)</b>
Cash and cash equivalents overseas	376,581	3,387
Trade receivables	358,283	1,124
Other assets	8,623	4,594
<b>Total Assets</b>	<b>743,487</b>	<b>9,105</b>
Borrowings and financing	(4,116,508)	(48,791)
Trade payables	(175,404)	(7,946)
Other liabilities	(3,529)	(920)
<b>Total Liabilities</b>	<b>(4,295,441)</b>	<b>(57,657)</b>
<b>Foreign exchange exposure</b>	<b>(3,551,954)</b>	<b>(48,552)</b>
Cash flow hedge accounting	2,076,045	
Net Investment hedge accounting		48,000
<b>Net foreign exchange exposure</b>	<b>(1,475,909)</b>	<b>(552)</b>
Perpetual bonds	1,000,000	
<b>Net foreign exchange exposure excluding perpetual bonds</b>	<b>(475,909)</b>	<b>(552)</b>

CSN uses as strategy the hedge accounting, as well as 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 13.b) shows the derivatives and hedging strategies to protect exchange and interest rates risks.

**13.b) Hedging instruments: Derivative and cash flows hedge accounting and foreign investment hedge accounting**

CSN uses instruments for protection of foreign currency risk and interest rate risk, as shown in the following topics:

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- **Portfolio of derivative financial instruments**

### Dollar x Euro swap

The subsidiary Lusosider has derivative transactions to protect its dollar exposure versus euro.

Counterparties	Maturity	Functional Currency	Notional amount	Appreciation (R\$)		Consolidated	12/31/2018 Impact on financial income (expenses) in 2018
				Asset position	Liability position	Fair value (market) Amounts receivable / (payable)	
<i>BCP</i>	03/08/2019	Dollar	18,563	71,967	(71,616)	351	(1)
<b>Total dollar-to-euro swap</b>			<b>18,563</b>	<b>71,967</b>	<b>(71,616)</b>	<b>351</b>	<b>(1)</b>
				<b>71,967</b>	<b>(71,616)</b>	<b>351</b>	<b>(1)</b>

- **Classification of the derivatives in the balance sheet and statement of income**

Instruments	Assets		Financial income (expenses)	12/31/2018	12/31/2017
	Current	Total		(expenses)	(Note 25)
<i>Dollar - to - euro swap</i>	351	351	(1)	(229)	
<i>Future DI</i>			-	28,503	
	<b>351</b>	<b>351</b>	<b>(1)</b>	<b>28,274</b>	

- **Cash flow hedge accounting**

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, 2018 the Company designated for hedge accounting US\$2,076,045 in exports to be carried out between January, 2019 to February, 2023.

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.

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The table below shows a summary of the hedging relationships as of December 31, 2018:

Designation Date	Hedging Instrument	Hedged item	Type of hedged risk	Hedged period	Exchange rate on designation	Designated amounts (US\$'000)	Amortized part (USD'000)	Effect on Result (*) (R\$'000)	S
3/11/2014	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	October 2016 - September 2019	2.4442	500,000	(250,003)	171,983	
1/12/2014	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	October 2015 - February 2019	2.5601	175,000	(154,999)	36,766	
12/18/2014	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	May 2020	2.6781	100,000			
07/21/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	July 2019 - March 2021	3.1813	60,000			
07/23/2015	Export prepayments in US\$ to third parties	Part of the highly probable	Foreign exchange - R\$ vs. US\$ spot	July 2019 - March 2021	3.2850	100,000			

07/23/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.285	30,000	(6,000)	5,102
07/24/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3254	100,000	(20,000)	16,198
07/27/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3557	25,000	(5,000)	3,898
07/27/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3557	70,000	(14,000)	10,914
07/27/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3557	30,000	(6,000)	4,677
07/28/2015	Export prepayments in US\$ to third parties	future monthly iron ore exports Part of the highly probable future monthly iron ore exports	rate Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3815	30,000	(6,000)	4,523

3/8/2015	Export prepayments in US\$ to third parties	exports Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	October 2018 - October 2022	3.3940	355,000	(11,998)	6,179
2/4/2018	Bonds	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	July 2018 - February 2023	3.3104	1,170,045	(195,000)	109,951
<b>Total</b>						<b>2,745,045</b>	<b>(669,000)</b>	<b>370,191</b>

(\*) The effect on the result was recorded in other operating expenses.

In the hedging relationships described above, the amounts of the debt instruments were fully designated for equivalent iron ore export portions.

The movements in the hedge accounting amounts recognized in shareholders' equity as of December 31, 2018 are as follows:

	<b>12/31/2017</b>	<b>Movement</b>	<b>Realization</b>	<b>12/31/2018</b>
Cash flow hedge accounting	395,524	1,415,962	(370,191)	1,441,295
<b>Fair value of cash flow hedge, net of taxes</b>	<b>395,524</b>	<b>1,415,962</b>	<b>(370,191)</b>	<b>1,441,295</b>

As of December 31, 2018, the hedging relationships established by the Company were effective, according to the prospective tests conducted. Thus, no reversal for hedge accounting ineffectiveness was recognized.

- Net investment hedge in foreign subsidiaries**

CSN has a natural foreign exchange exposure in Euros substantially arising from a loan made by a foreign subsidiary with functional currency in Reais, for the acquisition of investments abroad whose functional currency is Euro. Such exposure arises from converting the balance sheets of these subsidiaries for consolidation in CSN, and the exchange rate of the loans affected the income statement in the financial result item and the exchange variation of the net assets of the foreign operation directly affected the equity in other comprehensive income.

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As from September 1<sup>st</sup>, 2015 CSN began to adopt hedge of net investment to eliminate exposure and cover future fluctuations of the Euro on such loans. Non-derivative financial liabilities have been designated represented by loan agreements with financial institutions in the amount of € 120 million. The carrying amounts on December 31, 2018 are:

Designation Date	Hedging Instrument	Hedged item	Type of hedged risk	Exchange rate on designation	Designated amounts (EUR'000)	Amortized part (USD'000)	12/31/2018 Impact on shareholders' equity
09/01/2015	Non-derivative financial liabilities in EUR – Debt contract	Investments in subsidiaries which EUR is the functional currency	Foreign exchange - R\$ vs. EUR spot rate	4.0825	120,000	(72,000)	3,941
<b>Total</b>					<b>120,000</b>	<b>(72,000)</b>	<b>3,941</b>

The changes in the amounts related to net investment hedge recognized in shareholders' equity as of December 31, 2018 are presented below:

	12/31/2017	Movement	12/31/2018
Net Investment hedge accounting	(17,911)	21,852	3,941
<b>Fair value of net investment hedge in foreign operations</b>	<b>(17,911)</b>	<b>21,852</b>	<b>3,941</b>

On December 31, 2018 hedge relationships established by the Company found to be effective, according to prospective tests. Therefore, no reversal by ineffectiveness of the hedge was recorded.

### 13.c) Sensitivity analysis

We present below the sensitivity analysis for currency risk and interest rate.

- **Sensitivity analysis of Derivative Financial Instruments and consolidated Foreign Exchange Exposure**

The Company considered scenarios 1 and 2 as 25% and 50% of deterioration for volatility of the currency, using as reference the closing exchange rate as of December 31, 2018.

The currencies used in the sensitivity analysis and its scenarios are shown below:

Currency	Exchange rate	Probable scenario	12/31/2018	
			Scenario 1	Scenario 2
USD	3,8748	3,7626	4,8435	5,8122
EUR	4,4390	4,2833	5,5488	6,6585
USD x EUR	1,1456	1,1346	1,4320	1,7184

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<b>Interest</b>	<b>Interest rate</b>	<b>Scenario 1</b>	<b>12/31/2018</b>	
			<b>Scenario 1</b>	<b>Scenario 2</b>
CDI	6,40%	8,00%	9,60%	
TJLP	6,98%	8,73%	10,47%	
Libor	2,88%	3,60%	4,32%	

The effects on income statement, considering scenarios 1 and 2 are shown below:

<b>Instruments</b>	<b>Notional</b>	<b>Risk</b>	<b>Probable scenario (*)</b>	<b>12/31/2018</b>	
				<b>Scenario 1</b>	<b>Scenario 2</b>
Hedge accounting of exports	2,076,045	Dollar	(232,932)	2,011,065	4,022,130
Currency position (not including exchange derivatives above)	(3,551,954)	Dollar	398,529	(3,440,778)	(6,881,556)
<b>Consolidated exchange position</b> (including exchange derivatives above)	<b>(1,475,909)</b>	<b>Dollar</b>	<b>165,597</b>	<b>(1,429,713)</b>	<b>(2,859,426)</b>
Net Investment hedge accounting	48,000	Euro	(7,474)	53,268	106,536
Natural currency position	(48,552)	Euro	7,560	(53,881)	(107,762)
<b>Consolidated exchange position</b> (including exchange derivatives above)	<b>(552)</b>	<b>Euro</b>	<b>86</b>	<b>(613)</b>	<b>(1,226)</b>
Dollar-to-euro swap	18,563	Dollar	(1,011)	14,072	23,663

(\*) The probable sceneries were calculated considering the following variations to the specified risks: Real x Dollar – appreciation of Real in 2.89% / Real x Euro – appreciation of Real in 3.51%. Euro x Dollar –

appreciation of Euro in 0.96%. Source: Quotation from Central Bank of Brazil and Central Bank of Europe on 01/25/2019.

- **Sensitivity analysis of changes in interest rates**

The Company considered the scenarios 1, and 2 as 25% and 50% of evolution for volatility of the interest as of December 31, 2018.

Changes in interest rates	% p.a	Consolidated Impact on profit or loss				
		Assets	Liabilities	Probable scenario (*)	Scenario 1	Scenario 2
TJLP	6.98		(954,635)	(2,793)	(16,658)	(33,316)
Libor	2.88		(4,799,586)	(47,391)	(34,505)	(69,010)
CDI	6.40	609,480	(11,667,006)	(53,528)	(176,924)	(353,848)

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(\*) The sensitivity analysis is based on the assumption of maintaining as probable scenario the market rates at December 31, 2018 recorded in the Company's assets and liabilities.

### 13.d) Liquidity risk

It is the risk that the Company may not have sufficient net funds to honor its financial commitments as a result of mismatching of terms or volumes between scheduled receipts and payments.

To manage cash liquidity in domestic and foreign currency, assumptions of future disbursements and receipts are established and daily monitored by the treasury area. The payment schedules for the long-term portions of borrowings, financing and debentures are shown in note 12.

The following table shows the contractual maturities of financial liabilities, including accrued interest.

					<b>Consolidated</b>
<b>At December 31, 2018</b>	<b>Less than one year</b>	<b>From one to two years</b>	<b>From two to five years</b>	<b>Over five years</b>	<b>Total</b>
Borrowings, financing and debentures	5,681,797	10,192,606	8,608,664	4,459,675	28,942,742
Trade payables	3,473,822				3,473,822
Dividends and interest on capital	932,005				932,005

### IV - Fair values of assets and liabilities as compared to their carrying amounts

Financial assets and liabilities at fair value through profit or loss are recognized in current and non-current assets and liabilities, and any gains and losses are recognized as financial income or financial expenses, respectively.

The amounts are recognized in the financial statements at their carrying amounts, which are substantially similar to those that would be obtained if they were traded in the market. The fair values of other long-term assets and liabilities do not differ significantly from their carrying amounts, except the amounts below.

The estimated fair values for certain consolidated long-term borrowings and financing were calculated at prevailing market rates, taking into consideration the nature, terms and risks similar to those of the recorded contracts, as below:

		12/31/2018		12/31/2017	
	Carrying amount	Fair value	Carrying amount	Fair value	
Perpetual bonds	3,880,074	2,850,615	3,312,503	2,602,090	
Fixed Rate Notes	6,745,132	7,595,765	5,751,526	6,207,946	

(\*) Source: Bloomberg

- **Credit risks**

The exposure to credit risks of financial institutions complies with the parameters established by financial policy. The Company has as practice the detailed analysis of the patrimonial and financial situation of its clients, suppliers, the establishment of a credit limit and permanent monitoring of its debit balance.

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With regard to financial investments, the Company only made investments in institutions with low credit risk rated by rating agencies. Since part of the funds is invested in repurchase agreements that are backed by Brazilian Government Bonds, there is also exposure to the credit risk of the Brazilian State.

Regarding the exposure to credit risk in accounts receivable and other receivables, the company has a credit risk committee, in which each new customer is analyzed individually regarding their financial condition, prior to the granting of the credit limit and payment terms and periodically revised, according to the periodicity procedures of each business area.

- **Capital Management**

The Company seeks to optimize its capital structure in order to reduce its financial costs and maximize the return to its shareholders. The table below shows the evolution of the capital structure of the Company with financing by equity and third-party capital.

<b>Thousands of reais</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
Shareholder's equity (equity)	10,013,440	8,288,229
Borrowings and Financing (Third-party capital)	28,827,074	29,510,844
Gross Debit/Shareholder's equity	2.88	3.56

## 14 OTHER PAYABLES

The group of other payables classified in current and non-current liabilities is comprised as follows:

	<b>Current</b>		<b>Consolidated Non-current</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
Payables to related parties (note 19 b)	35,499	3,097	96,629	
Dividends and interest on capital payable (Note 13 I)	932,005	510,692		
Advances from customers	137,418	68,521		
Taxes in installments	20,179	21,551	73,934	79,242
Profit sharing - employees	113,219	42,699		
Taxes payable			8,631	8,410
	392,612	336,886		

Provision from consumption and services

Third party materials in our possession	45,915	231		
Other payables	28,010	31,303	48,134	41,671
	<b>1,704,857</b>	<b>1,014,980</b>	<b>227,328</b>	<b>129,323</b>

In 2018, the Company reclassified the amount of R\$ (44,921) in the Consolidated, which were classified as suppliers.

## 15 INCOME TAX AND SOCIAL CONTRIBUTION

### 15.a) Income tax and social contribution recognized in profit or loss:

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The income tax and social contribution recognized in profit or loss for the year are as follows:

	12/31/2018	12/31/2017	<b>Consolidated 12/31/2016</b>
<b>Income tax and social contribution income (expense)</b>			
Current	(827,229)	(358,981)	(206,178)
Deferred	576,895	(50,128)	(60,368)
	<b>(250,334)</b>	<b>(409,109)</b>	<b>(266,546)</b>

The reconciliation of consolidated income tax and social contribution expenses and income and the result from applying the effective rate to profit before income tax and social contribution are as follows:

	12/31/2018	12/31/2017	<b>Consolidated 12/31/2016</b>
<b>Profit/(Loss) before income tax and social contribution</b>	<b>5,450,917</b>	<b>520,338</b>	<b>(576,951)</b>
Tax rate	34%	34%	34%
<b>Income tax and social contribution at combined statutory rate</b>	<b>(1,853,312)</b>	<b>(176,915)</b>	<b>196,163</b>
<b>Adjustment to reflect the effective rate:</b>			
Equity in results of affiliated companies	50,134	42,431	22,072
Profit with differentiated rates or untaxed	(46,006)	37,605	(287,502)
Transfer pricing adjustment	(74,836)	(34,746)	(63,638)
Tax loss carryforwards without recognizing deferred taxes	(27,683)	(368,612)	(821,920)
Indebtdness limit	(38,486)	(39,378)	(35,391)
Unrecorded deferred taxes on temporary differences	(11,964)	541,655	643,990
Deferred Income Tax and social contribution on temporary differences	971,972		
(Losses)/Reversal for deferred income and social contribution tax credits	835,937	(403,080)	44,691
Income taxes and social contribution on foreign profit	(30,219)	(29,964)	(35,613)
Amortization – Goodwill Metalic			31,439
Tax incentives	36,710	14,358	22,673
Deferred taxes on exchange variation in equity	(43,667)		

Other permanent deductions (additions)	(18,914)	7,537	16,490
<b>Income tax and social contribution in profit for the period</b>	<b>(250,334)</b>	<b>(409,109)</b>	<b>(266,546)</b>
<b>Effective tax rate</b>	<b>5%</b>	<b>79%</b>	<b>-46%</b>

**15.b) Deferred income tax and social contribution:**

Deferred income tax and social contribution are calculated on income tax and social contribution losses and the corresponding temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements:

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	12/31/2016	Movement			12/31/2017	Movement		
	Shareholders' Equity	P&L	Others		Shareholders' Equity	P&L	Others	
<b>Deferred</b>								
Income tax losses	970,800	245,846	(79,412)	1,137,234		(177,378)	(6)	
Social contribution tax losses	340,629	94,843	(28,588)	406,884		(39,303)	(2)	
<b>Temporary differences</b>	<b>(2,288,175)</b>	<b>26,778</b>	<b>(390,817)</b>	<b>(2,344)</b>	<b>(2,654,558)</b>	<b>21,208</b>	<b>793,576</b>	<b>8</b>
- Provision for tax. social security, labor, civil and environmental risks	256,936	12,963		269,899		(5,846)	3,1	
- Provision for environmental liabilities	95,048	(8,197)		86,851		(19,708)		
- Asset impairment losses	93,908	(5,475)		88,433		(7,092)		
- Inventory impairment losses	35,703	10,111		45,814		(7,054)		
- (Gains)/losses on financial instruments	(2,300)	1,388		(912)		(2,407)		
- (Gains)/losses on available-for-sale financial assets	705,929	316,563		417,659	530,292	(584,856)		
- Actuarial liability (pension and healthcare plan)	134,578	180,834	(41,065)	(1,289)	273,058	(48)	3,022	
- Accrued supplies and services	123,101	(55,385)		67,716		27,928		
- Allowance for doubtful debts	42,008	5,208		47,216		14,199		
- Goodwill on merger	815	(207)		608		(608)		
	1,589,651	56,493		1,511,152				

3.c) Statement of Cash Flows

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- Unrealized exchange differences (1)		(134,992)					(500,620)
- (Gain) on loss of control over Transnordestina	(92,180)				(92,180)		
- Cash flow hedge accounting	148,471	(13,992)			134,479	355,563	
- Aquisition Fair Value SWT/CBL	(199,001)	(21,143)	26,833		(193,311)	(16,683)	37,880
- Deferred taxes non computed	(1,324,437)	(566,173)	(3,255)	(115)	(212,236)		(38,359) (2,3
- (Losses) estimated/reversals to deferred taxes credits	(3,013,730)	82,769	(123,056)		(4,130,928)	(885,069)	1,929,424
- Business Combination	(1,072,824)		32,288		(1,040,536)		9,724
- Other	190,149	(8,573)	(107,976)	(940)	72,660	37,153	(62,051)
<b>Total</b>	<b>(976,746)</b>	<b>26,778</b>	<b>(50,128)</b>	<b>(110,344)</b>	<b>(1,110,440)</b>	<b>21,208</b>	<b>576,895</b>
Total Deferred Assets	70,151				63,119		
Total Deferred Liabilities	(1,046,897)				(1,173,559)		
<b>Total Deferred</b>	<b>(976,746)</b>				<b>(1,110,440)</b>		

(1) The Company taxes exchange differences on a cash basis to calculate income tax and social contribution on net income.

The Company has foreign subsidiaries in its corporate structure, for which profits are taxed at income tax in the countries where they are domiciled by lower rates than those prevailing in Brazil. From 2013 up to 2018 such foreign subsidiaries generated profits amounting to R\$ 1,150,443. If for some reason tax authorities understand that these profits are subject to additional taxation in Brazil in respect of income tax and social contribution, which if due, would total R\$ 366,847.

The Company, based on its legal counsel's opinion, assessed the likelihood of loss in a potential claiming by tax authorities which resulted in a possible risk of loss and, therefore, no provision was recognized in the financial statements.



**15.c) Income tax and social contribution Impairment test – deferred tax assets**

The Company's management constantly evaluates the ability to use its tax credits. In this direction, CSN periodically updates a technical study to demonstrate if the generation of future taxable profits support the realization of tax credits and, consequently support the accounting recognition of tax credits, the maintenance on the balance sheet or the constitution of a provision for loss in the realization of these credits.

This study is prepared at Entity level, in accordance with the Brazilian tax legislation, and is performed considering the Company's projections, which is the entity that generates a significant amount of tax credits, mainly, temporary differences. The Company covers the following businesses:

- Steel Brazil (Steel); and
- Cement;

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The deferred tax assets on tax losses and temporary differences refers mainly to the following:

	<b>Nature</b>	<b>Description</b>
	Tax losses	In recent periods, the Company started to incur tax losses, mostly because of high financial expenses, since it holds substantially all loans and financings of CSN group and presented a taxable income in 2018.
	Foreign exchange differences	Since 2012 the Company opted for the taxation of exchange differences on a cash basis. As the Company has operated without taxable profit it would not make sense to use this deductibility year by year (accrual basis). As a result of the cash basis tax treatment, taxes are only due, and expenses are only deductible at the time of debt settlement.
Temporary differences	Losses on Usiminas shares	The losses on Usiminas shares are recognized on an accrual basis, but the taxable event will occur only at the time of divestment.
	Other provisions	Various accounting provisions are recognized on an accrual basis, but their taxation occurs only at the time of its realization, such as provisions for contingencies, impairment losses, environmental liabilities, etc.

The study prepared is based on the Company business plan of on a long-term basis, reasonably estimated by management and considered several scenarios which vary according to different macroeconomic and operating assumptions.

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

- Pre-Tax Profit, reflecting our projected EBITDA plus depreciation, other income and expenses and financial income (expenses); and
- Taxable Profit, which is our pre-tax profit plus (minus) expenses and income items that are taxable at a time different from the time obtained on an accrual basis (temporary differences).

In addition, a sensitivity analysis of tax credits utilization considering a variation in macroeconomic assumptions, operational performance and liquidity events took place.

A significant aspect to be considered in the analysis is the fact that CSN has presented recent tax losses mainly due to the deterioration of the Brazilian political and macroeconomic environment, as well as the growth of its financial leverage. These two aspects combined led to an unbalance between the financial and operating results of the Company.

Within this context, the Company works with a business plan to rebalance between the financial and operating results of the Company, whose main measures are:

- Expansion of disinvestment efforts;
- Reduction of financial leverage;
- Improvement in operating results due to increased sales volume, better prices of its products and efficiency in controlling production costs and
- Reprofiting of the Company's indebtedness, with negotiations to extend the amortization periods and decentralization of debt through redirection of contracts to subsidiaries according to the nature and application of resources.

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With the aforementioned measures already in execution, the Company's management expects to retake high profitability rates. Accordingly, management considers that the gradual recognition of tax credits, using at first a time period of projections of less than 10 years, better reflects the expectation of utilization of the credits recognized in the Company's tax books. As a result of the study, the Company reversed R\$ 971,972 of the loss recorded in previous years, presenting until 2018 credits recognized in the amount of R\$ 250,334 in the Consolidated.

#### 15.d) Income tax and social contribution recognized in shareholders' equity:

The income tax and social contribution recognized directly in shareholders' equity are as follows:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
<b>Income tax and social contribution</b>		
Actuarial gains on defined benefit pension plan	176,700	176,658
Estimated losses for deferred income tax and social contribution credits - actuarial gains	(180,048)	(180,834)
Changes in the fair value of assets measured at fair value through other comprehensive income		(530,292)
Estimated losses for deferred income tax and social contribution assets - assets measured at fair value through other comprehensive income		530,292
Exchange differences on foreign operations	(325,350)	(369,017)
Cash flow hedge accounting	490,041	134,478
Estimated losses for deferred income tax and social contribution credits - cash flow hedge	(490,041)	(134,478)
	<b>(328,698)</b>	<b>(373,193)</b>

## 16 Taxes in installments

The position of the Refis debts and other tax installment payment plans, recorded in taxes in installments in current and non-current liabilities, as mentioned in note 14, is as follows:

	<b>Consolidated</b>	<b>Current</b>		<b>Non-current</b>
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
Federal REFIS Law 11.941/09	12,100	12,552	18,895	20,083
Federal REFIS Law 12.865/13	6,240	5,984	52,661	56,381
Other taxes in installments	1,839	3,015	2,378	2,778
	<b>20,179</b>	<b>21,551</b>	<b>73,934</b>	<b>79,242</b>

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## 17 PROVISION FOR TAX, SOCIAL SECURITY, LABOR, CIVIL AND ENVIRONMENTAL RISKS AND JUDICIAL DEPOSITS

Claims of different nature are being challenged at the appropriate courts. Details of the accrued amounts and related judicial deposits are as follows:

	Accrued liabilities		Consolidated Judicial deposits	
	12/31/2018	12/31/2017	12/31/2018	12/31/2017
Tax	118,490	113,451	46,321	52,542
Social security	70,084	74,522	50,898	50,098
Labor	362,228	451,173	214,625	202,104
Civil	210,264	148,212	22,024	22,752
Environmental	31,390	37,733	1,900	1,826
Deposit of a guarantee			12,182	10,029
	<b>792,456</b>	<b>825,091</b>	<b>347,950</b>	<b>339,351</b>
<b>Classification</b>				
Current		106,503	105,958	
Non-current		685,953	719,133	347,950
		<b>792,456</b>	<b>825,091</b>	<b>347,950</b>
			<b>347,950</b>	<b>339,351</b>

The changes in the provision for tax, social security, labor, civil and environmental risks in the year ended December 31, 2018 were as follows:

Nature	12/31/2017	Additions	Net update on amount	Net utilization of reversal	Consolidated
					Current + Non-current
					12/31/2018
Tax	113,451	17,941	12,081	(24,983)	118,490
Social security	74,522	2,348	1,996	(8,782)	70,084
Labor	451,173	29,250	55,344	(173,539)	362,228
Civil	148,212	14,921	56,092	(8,961)	210,264

Environmental	37,733	31	6,021	(12,395)	31,390
	<b>825,091</b>	<b>64,491</b>	<b>131,534</b>	<b>(228,660)</b>	<b>792,456</b>

The provision for tax, social security, labor, civil and environmental liabilities was estimated by management and is mainly based on the legal counsel's assessment and only proceedings for which the risk is classified as probable loss are accrued. Additionally, this provision includes tax liabilities resulting from lawsuits filed by the Company, subject to SELIC (Central Bank's policy rate).

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### **Tax lawsuits**

The main tax lawsuits assessed by the outside legal counsel as probable losses which CSN or its subsidiaries are parties are as follows: (i) Municipal tax assessments (ISS) incident in lease contracts; (ii) Tax Forfeiture to collect ICMS reported but not paid; (iii) Consignment action for payment of social security contributions; (iv) collection of income tax and social contribution for the offset of nonexistent tax credits.

### **Labor lawsuits**

As of December 31, 2018, the Group is a defendant in 7,665 labor lawsuits. Most of the claims relate to subsidiary and/or joint liability, salary equalization, health hazard premiums and hazardous duty premiums, overtime pay, health care plan, indemnity claims resulting from alleged occupational diseases or on-the-job accidents, breaks between working hours, and differences in profit sharing from 1997 to 1999 and from 2000 to 2003.

During the year ended December 31, 2018 there were addition or write-off movements in labor lawsuits arising from the definite conclusion and the constant revision of the Company's accounting estimates related to the provision for contingencies that take into consideration the different nature of the claims made, as required by the Company's accounting policies.

### **Civil lawsuits**

Among the civil lawsuits in which the Company is a defendant are claims for compensation. Generally, these lawsuits result from on-the-job accidents, occupational diseases and contractual litigation related to the industrial activities of the Group, real estate actions, healthcare plan.

### **Environmental lawsuits**



The environmental administrative/judicial proceedings filed against the Company include mainly administrative proceedings for alleged environmental irregularities and the regularization of environmental permits; at the judicial level, the Company is a party to actions collecting the fines imposed for such alleged environmental irregularities and public civil actions claiming regularization coupled with compensation, in most cases claiming environmental recovery. In general, these proceedings arise from alleged impacts to the environment related to the Company's industrial activities.

The environmental processes present high complexity for estimating the value at risk, should be taken into consideration, among various aspects, procedural development, the extent of damage and the projection of repairing costs.

There are other environmental processes for which it is not yet possible to assess the risk and contingency value due to the aforementioned complexity in estimation, the peculiarities of the matters involving them and also their procedural steps. The main processes of environmental nature are listed below:

- In 2010, CSN signed a Term for Undertaking ("*Termos de Ajustamento de Conduta*" or "TAC") with the State of Rio de Janeiro to study and make investments to update environmental control equipment at the steel plant UPV. In the TAC it was initially estimated investments in the amount of R\$216 million, increased to R\$260 million after the cost of projects was determined more precisely. In 2013 we signed an addendum to the TAC in order to enlighten certain issues, as well as to include further obligations established by the State Environmental Institute ("*Instituto Estadual do Ambiente*" or "INEA"), which resulted in additional investments of R\$165 million, already made. The TAC signed in 2010 expired in 2015 and CSN, the State of Rio de Janeiro and INEA signed a new TAC in April 2016, which determined new investments amounting to R\$178.5 million to adopt measures of adequacy at UPV, the payment of environmental fines of R\$16 million and the amount of R\$6.1 million as a compensatory measure to be applied in environmental programs in Volta Redonda. UPV was authorized to fully operate during the period the TAC 03/2016 is in force by the environmental authorization nº IN034283 ("*Autorização Ambiental de Funcionamento*" or "AAF").

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Within the context of the TAC 03/2016, upon the expiration of the environmental authorization, a renewal of the authorization was issued in 12/07/2017 by the Deliberation CECA/CFL n° 6.141 (“AA”) under n° IN042958, published in the *Diário Oficial* of the state of Rio de Janeiro (“DO”) in 12/08/2017, page 13, allowing the full operation of UPV for 180 days which will expire on June 20, 2018, which, by the Deliberation CECA n°. 6,189 dated 06/19/2018, published in the DO of 06/20/2018, extended for 90 days the period of validity of AA to operate the UPV, that is, until September 20, 2018.

During this period, the Company continued discussions with the Environmental Authorities of the State of Rio de Janeiro with a view to the consensual solution to the environmental issues of the plant, and on September 19, 2018, it was published in the *Diário Oficial* of the State of Rio de Janeiro (“DO”) by the deliberation CECA/CLF n° 6,216 of 09/18/2018, authorizing the conclusion of a new TAC between the Company and the State of Rio de Janeiro - through the Secretary of State for the Environment (“*Secretaria do Estado do Meio Ambiente*” or “SEA”), INEA and the State Commission of Environmental Control (“*Comissão Estadual de Controle Ambiental*” or “ECSC”), thereby maintaining the full operation of UPV. In parallel, INEA issued the Environmental Authorization for Operation (“AAF”) n°. IN 002019, valid until October 2024, whose purpose is to authorize the regular operation of the UPV during compliance with TAC 07/2018.

This new TAC 07/2018 contemplates investments of approximately R\$ 303 million in environmental projects and actions in the region up to August 2024 and represents a commitment of the Company to the sustainability of its activities, with the communities of Volta Redonda and the region, as well as with the generation of value to its shareholders, employees and other stakeholders.

- In July 2012, the Public Ministry of the State of Rio de Janeiro, (“*Ministério Público do Estado do Rio de Janeiro*” or “MPE/RJ”) and the Public Federal Ministry (“*Ministério Público Federal*” or “MPF”) filed a separate public civil action in the state and Federal Courts alleging, in existence of supposed contaminated area in the Condominium Volta Grande IV. In view of the conflict of jurisdiction to judge actions, the Superior Court of Justice (“*Superior Tribunal de Justiça*” or “STJ”) declared the jurisdiction of the Federal Court to prosecute and judge such actions. In brief, the MPF maintains that the company should (i) remove wastings left in industrial landfill areas in the city of Volta Redonda and (ii) transfer 750 residences of the Volta Grande IV condominium, also in the city of Volta Redonda. These requirements were denied by the Court, which determined the presentation of a schedule to investigate the area and, if necessary, to remediate the potential issues raised by the MPF. The aforementioned schedule was presented and all the surveys performed during the investigation including the risk assessment and intervention plan were concluded in April 30, 2014. Also, there are actions initiated by owners of the residential condominium mentioned above to be reimbursed for material and moral damages, not yet judged.

- In January 2014, it was distributed an Annulment Action with the purpose of declaring the nullity of an Assessment Notice issued by INEA for the alleged contamination of the soil and groundwater in the Volta Grande IV Condominium. The penalty was a simple fine, in the amount of R\$ 35 million. The request for the preliminary suspension of the chargeability of the debt was not assessed, which is why INEA filed a Tax Enforcement Action. Declared connection between actions. An application for suspension of the procedure was filed until the conclusion of the investigation in the ACP Volta Grande IV.
- With regards to other supposedly contaminated areas in Volta Redonda, the Public Ministry initiated three public civil actions claiming for environmental remediation and indemnification related to certain areas denominated Marcia I, II, III and IV, Wandir I and II and Reciclam. Regarding the latter, the definition from the responsible part to produce evidences still depends. These claims are at initial stage and we are currently performing environmental studies that will determine the extent of possible environmental damages related to soil contamination, as well as the action plan to fulfill with the legislation in force. As soon as the studies are concluded, they will be presented and added to the pleadings.
- In 2015, the Public Federal Ministry initiated a public civil action against us claiming for the adequacy and regularization for the emission of particles from the UPV and the stoppage of its operations. In accordance with CONAMA Resolution n.º 436/2011, we have to adjust the emission of particles to match to the current legal standards required by December 2018, which should be compatible with the schedule of actions and measures foreseen in TAC 07/2018.

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- In 2016, we were mentioned in public civil action proposed by the Public Federal Ministry and the Public Ministry of the State of Rio de Janeiro in relation to a supposedly irregular waste deposit in the landfill area named "Aterro Panco". The claimings are for the recovery of degraded areas, compensation for damages to fauna and flora and to human health, as well as indemnification for material and moral damages caused to the environment. Due to the nature of this action and to the current stage of the pleading, this action is still considered as inestimable.
- In 2004, the Public Federal Ministry initiated a public civil action against us for a supposedly environmental contamination and pollution of the Paraíba do Sul river supposedly caused by our industrial activities of UPV. The second federal regional court maintained the condemnation previously given and reinforced the obligation of the Company to compensate eventual environmental damages. We appealed to the Superior Court of Justice (STJ), which accepted the appeal and determined the pleading to return to the previous stage to resume the process.
- A civil investigation is ongoing to assess (i) the environmental requisites to our project in the city of Arcos (cement plant); (ii) monitoring and mitigation of the environmental impacts of our productive activities; (iii) conformity of the conditions our our environmental licenses, including the creation of a museum in Corumbá ecological station and the establishment of a Private Reserve of the Natural Heritage; and (iv) measures for preservation of the cultural heritage and adoption of compensatory measures. In February 2011 a Term of Undertaking was signed ("TAC") to assure the fulfillment of the obligations raised by the Public Ministry. The Ministerial Board has issued a clearance certificate to the major part of the TAC, except for two pending items that still remain open.
- In 2009 and 2010, we signed Judicial Agreements ("TAJ") with the Public Federal Ministry to recover environmental liabilities caused by our coal mining activities in the Southeast of Santa Catarina until the 90's. The environmental liabilities reached by the TAJ include the restoration of certain degraded areas. In March 2018, the parties renegotiated a new agreement, with the extension of the construction schedule until 2030, which was legally approved on 06/06/18, and is in compliance by the Company.
- In July 2018, the Company and Harsco Metals ("Harsco"), a contracted company, were named in a new public civil action jointly filed by the Federal Public Ministry and the Public Prosecutor's Office of the State of Rio de Janeiro, due to the irregular deposit of waste (steel slag) in the area called "Patio Volta Grande". The decision issued established a certain limitation in the monthly dispatch of the slag to the said yard, reduction of the height of the piles and removal of the excess of the stored material. The Company and Harsco have been looking for alternatives to solve this problem and are working on a plan of action with a feasible schedule, due to the concern with the impacts that can be generated by the abrupt removal

of the yard material within the deadline established in the preliminary decision

- In January 1995, in the Municipality of Volta Redonda/RJ (“MVR”), the ACP was filed claimed to CSN to comply with 26 items of Compensatory Environmental Programs. After the dispute, the parties entered into Transaction (1995), establishing CSN's effective obligations, as well as environmental compensation, ratified in court by judgment. The Municipality of Volta Redonda disagreed about the approved agreement and in 2015 the process of liquidation of unfulfilled obligations was initiated. On December 27, 2018, a new agreement was signed between CSN and the MRV, to put an end to the legal dispute, through reciprocal concessions from the parties, with the MVR expressly waiving the right on which the lawsuit is based and to CSN an additional investment in the amount of R\$ 21 million, with 30% of this amount being allocated to services of environmental interest, preservation works, improvement and recovery of the quality of the environment of Volta Redonda.

- In August 2017, CSN initiated an annulment action against the tax assessment notice that imposed a fine on CSN (R\$ 22,038,856.09 – updated until January/19), for alleged pollution of the water of the Paraíba do Sul River, with discharge of effluent from the ETE of Blast Furnace # 2, due to accident occurred on 11/27/2010. The enforceability of the fine is suspended by virtue of an injunction granted in a writ of mandamus until final decision of the appeal phase that discusses the guarantee offered to the court (suitable guarantee) for the grant of guardianship. In relation to the mining activities matters, due to the accident involving a Brazilian mining company in November 2015, the State of Minas Gerais initiated several civil investigations based on the inventory of tailing dams of the State released in 2014. Those procedures have the scope of ascertaining those structures that do not have technical stability guaranteed by an external auditor or whose stability has not been attested due to a lack of documents or technical data.

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- In March 2016 we were mentioned in a public civil action proposed by the State of Minas Gerais and by the State Environmental Foundation (“*Fundação Ambiental do Estado*” or “FEAM”) questioning the stability of the structure of our tailing dam known as “BAIA 4” – a small structure built within the industrial area and used to collect particles generated during the process of ore filtration. That process was filed before the defense takes place due to out-of-date information. CSN was able to prove that BAIA 4 structure was steady which led to the filing of the action, by the author himself. In August 2016, we were mentioned in a similar public civil action in relation to the dam structure known as “*Dique do Engenho*” (Engenho dam). We presented the documentation to the State authorities to prove the stability and safety of the Engenho dam. We expect this action be filed, for the same reasons as previous one.

- Other administrative and judicial proceedings

The table below shows a summary of the carrying amounts of the main legal matters with possible risk of loss and the amounts on December 31, 2018 and 2017.

	<b>12/31/2018</b>	<b>12/31/2017</b>
Income tax / Social contribution - Assessment Notice and imposition of fine (AIIM) - Capital gain for an alleged sale of the shares of its subsidiary NAMISA.	11,812,071	11,073,961
Assessment Notice and Imposition of fine (AIIM) - Income tax/ Social contribution - gloss of goodwill deductions generated by the reverse merger of Big Jump by NAMISA	3,722,888	2,623,179
Assessment Notice and Imposition of fine (AIIM) - Income tax/ Social contribution - gloss of interest on prepayment arising from supply contracts of iron ore and port services	2,165,088	2,500,606
Notices of violation and imposition of fine - Income taxes and social contribution due to profits from foreign subsidiaries (years 2008,2010 and 2011) (1)	1,891,149	1,858,640
Tax foreclosures - ICMS - Electricity credits	974,479	920,306
Installment MP 470 - Insufficient impairment of tax loss and negative basis (1)		704,739
Offset of taxes that were not approved by the Federal Revenue Service - IRPJ/CSLL, PIS/COFINS e IPI	1,481,382	1,685,648

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Disallowance of the ICMS credits - Transfer of iron ore	529,607	499,006
ICMS - Refers to the transfer of imported raw material at an amount lower than the price disclosed in the import documentation	294,527	275,233
Disallowance of the tax losses arising on adjustments to the SAPLI	516,583	491,862
Taxes - ICMS - shipment and return of goods for industrialization (2)		816,199
Assessment Notice- Income tax- Capital Gain of CFM vendors located outside	243,007	203,185
CFEM - Divergence on the understanding between CSN and DNPM on the calculation basis	311,582	290,249
Infraction Notice - ICMS - Question on sales to Incentivized Zone	976,438	170,330
Other tax (federal, state, and municipal) lawsuits	3,625,167	3,065,131
Social security lawsuits	287,823	278,600
Law suit applied by Brazilian antitrust authorities (CADE)	101,683	98,189
Other civil lawsuits	922,171	1,111,944
Labor and social security lawsuits	1,537,078	1,569,712
Environmental process - ACP TAC / PAC - Compliance with environmental obligations (3)		216,878
Tax Enforcement Fine Volta Grande IV (4)	75,530	67,620
Others Enviromental lawsuits	144,235	117,858
	<b>31,612,488</b>	<b>30,639,075</b>

(1) The Contingency was written off as a result of a final favorable decision by CARF, which recognized as certain the use of tax loss carryforwards used in the installment plan established by MP 470.

(2) Homologation to the Secretary of Finance and General Advocacy of the State of Minas Gerais with the benefits brought in the Tax Regularization Program - "New Regularize", established by Law 22,549 / 2017.

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(3) We reclassified the contingency related to this judicial process (ACP TAC-PAC nº 0000689-17.1995.8.19.0066) to remote, due to the conclusion of an agreement between CSN and the Municipality of Volta Redonda (MVR) on 12/27/2018, which will put an end to the legal dispute, through reciprocal concessions from the parties, and the MVR expressly waives the right on which the action is based and to CSN the additional investment in the amount of R \$ 21 million, and 30% services of environmental interest, preservation works, improvement and recovery of the quality of the environment of Volta Redonda

(4) On April 8, 2013, INEA imposed on CSN a fine of R\$ 35 million in respect of the aspects involving the Volta Grande IV condominium, determining that the actions already considered and discussed in the civil suit filed in July 2012. In connection with the application of this fine, an annulment action was distributed, in January 2014, to the 10th Civil Court of the State of Rio de Janeiro, seeking the annulment of the fine and its effects. In parallel, INEA filed a tax enforcement action in order to enforce the amount of the fine imposed. The aforementioned Tax Enforcement action was distributed in May 2014 to the 4th Volta Redonda Active Debt Registry in the State of Rio de Janeiro. Currently, said enforcement action is suspended until the judgment of the annulment action, in order to avoid conflicting decisions.

The assessments made by the legal counsel define these administrative and judicial proceedings as entailing risk of possible loss and, therefore, no provision was recorded in conformity with Management's judgment and accounting practices adopted in Brazil.

## 18 PROVISION FOR ENVIRONMENTAL LIABILITIES AND ASSET RETIREMENT OBLIGATIONS

The carrying amount of the provision for environmental liabilities and asset retirement obligation (ARO) are as follows:

	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
Environmental liabilities	198,386	255,517
Asset retirement obligations	83,380	81,496
	<b>281,766</b>	<b>337,013</b>



### **18.a) Environmental liabilities**

As of December 31, 2018, there is a provision recognized for expenditures relating to environmental investigation and recovery services for potentially contaminated areas surrounding establishments in the States of Rio de Janeiro, Minas Gerais and Santa Catarina. Estimated expenditures will be reviewed periodically and the amounts already recognized will be adjusted whenever necessary. These are Management's best estimates based on the environmental remediation studies and projects. This provision is recognized as other operating expenses.

The provision is measured at the present value of the expenditures required to settle the obligation, using a pretax rate that reflects current market assessments of the time value of money and the specific risks of the obligation. The increase in the obligation due to passage of time is recognized as other operating expenses.

The discount rate used to calculate the provision to present value through December 31, 2018 was 10.54% in real terms. The liability recognized is periodically updated based on the general market price index (IGP-M) for the period.

Some contingent environmental liabilities are monitored by environmental department were not recorded in provisions due to its characteristics, they do not meet the recognition criteria present in IAS 37.

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### **18.b) Asset retirement**

Asset retirement obligations refer to estimated costs for decommissioning, retirement or restoration of areas upon the termination of activities related to 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, being depreciated over the useful life of the asset.

In 2015, the Company completed a new certification of iron mineral reserves in the Casa de Pedra and Engenho mines. This certification, prepared by a specialized company, has certified reserves of 3,021 million tons of iron ore.

## **19 RELATED-PARTY BALANCES AND TRANSACTIONS**

### **19.a) Transactions with holding companies**

Vicunha Siderurgia S.A. is the Company's main shareholder, with 49,24% of the voting shares.

The Company's control Vicunha Aços S.A. and Rio Iaco Participações S.A, the latter holding 4,22% of interest in the voting capital of the Company.

The corporate structure of Vicunha Aços S.A is as follows:

Vicunha Steel S.A. – holds 67.93% of Vicunha Aços S.A.

CFL Participações S.A. – holds 12.82% of Vicunha Aços S.A. and 40% of Vicunha Steel S.A.

Rio Purus Participações S.A. – holds 19.25% of Vicunha Aços S.A. and 60% of Vicunha Steel S.A.

### **3.c) Statement of Cash Flows**

- Liabilities

	<b>Companies</b>	<b>Proposed Dividends</b>
Vicunha Aços		439,913
Rio Iaco Participações S.A.		37,640
<b>Total at 12/31/2018</b>		<b>477,553</b>
<b>Total at 12/31/2017</b>		<b>-</b>

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**19.b) Transactions with subsidiaries, joint ventures, associates, exclusive funds and other related parties**

- **By transaction**

	<b>Current</b>		<b>Non-current</b>		<b>Consolidated Total</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Assets</b>						
Trade receivables(note 6)	93,317	115,388			93,317	115,388
Dividends receivable (Note 8)	46,171	41,528			46,171	41,528
Actuarial asset (note 8)			99,894	111,281	99,894	111,281
Financial investments/ investments	92,332	53			92,332	53
Loans (note 8)	2,675	2,441	706,605	554,694	709,280	557,135
Other receivables (note 8)	3,649	3,577	218,840	30,770	222,489	34,347
	<b>238,144</b>	<b>162,987</b>	<b>1,025,339</b>	<b>696,745</b>	<b>1,263,483</b>	<b>859,732</b>
<b>Liabilities</b>						
Other payables (Note 14)						
Accounts payable	29,286	799	96,629		125,915	799
Provision for consumption and services	6,213	2,298			6,213	2,298
Trade payables	135,801	134,974			135,801	134,974
Actuarial liabilities			7,982	41,937	7,982	41,937
	<b>171,300</b>	<b>138,071</b>	<b>104,611</b>	<b>41,937</b>	<b>275,911</b>	<b>180,008</b>

**By Transaction - Statement of Income**

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
<b>P&amp;L</b>			
<b>Revenues</b>			
Sales	1,278,751	880,145	878,992
Interest (note 25)	64,888	61,549	60,964
<b>Expenses</b>			
Purchases	(1,418,282)	(1,176,930)	(1,099,851)
Interest (note 25)	(16,092)		(3,185)
Foreing exchange and monetary variations, net	13,611		(18,398)
	<b>(77,124)</b>	<b>(235,236)</b>	<b>(181,478)</b>

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- By company - Assets and Liabilities

	Assets			Liabilities		
	Current	Non-current	Total	Current	Non-current	Total
<b>Joint-venture and Joint-operation</b>						
Itá Energética S.A.				2,550		2,550
MRS Logística S.A.	46,243		46,243	101,264	96,629.00	197,893
CBSI - Companhia Brasileira de Serviços e Infraestrutura Transnordestina Logística S.A (1)	3		3	37,362		37,362
	1,611	925,445	927,056	13,652		13,652
	<b>47,857</b>	<b>925,445</b>	<b>973,302</b>	<b>154,828</b>	<b>96,629</b>	<b>251,457</b>
<b>Other related parties</b>						
CBS Previdência Banco Fibra (2)	92,334	99,894	99,894		7,982	7,982
Usiminas Panatlântica (3)	53,027		53,027	15,643		15,643
Ibis Participações e Serviços						
Other related parties	2,092		2,092	829		829
	<b>147,453</b>	<b>99,894</b>	<b>247,347</b>	<b>16,472</b>	<b>7,982</b>	<b>24,454</b>
<b>Associates</b>						
Arvedi Metalfer do Brasil S.A.	42,834		42,834			
<b>Total at 12/31/2018</b>	<b>238,144</b>	<b>1,025,339</b>	<b>1,263,483</b>	<b>171,300</b>	<b>104,611</b>	<b>275,911</b>
<b>Total at 12/31/2017</b>	<b>162,987</b>	<b>696,745</b>	<b>859,732</b>	<b>138,071</b>	<b>41,937</b>	<b>180,008</b>

- By company - Statement of income

Sales	Purchases	Finance income(expenses),	Exchange rate	12/31/2018 Total
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			<b>net</b>	<b>variations, net</b>	
<b>Joint ventures and Joint Operation</b>					
MRS Logística S,A,		(1,111,695)	(16,092)		(1,127,787)
CBSI - Companhia Brasileira de Serviços e Infraestrutura	47	(180,332)			(180,285)
Transnordestina Logística S.A. (1)	367	(15,667)	50,003		34,703
	<b>414</b>	<b>(1,307,694)</b>	<b>33,911</b>		<b>(1,273,369)</b>
<b>Other related parties</b>					
Banco Fibra (2)			14,651	13,611	28,262
Usiminas		(382)			(382)
Panatlântica (3)	1,174,984	(94,515)			1,080,469
Ibis Participações e Serviços		(4,501)			(4,501)
Other related parties	2,745	(11,190)			(8,445)
	<b>1,177,729</b>	<b>(110,588)</b>	<b>14,651</b>	<b>13,611</b>	<b>1,095,403</b>
<b>Associates</b>					
Arvedi Metalfer do Brasil S,A,	100,608		234		100,842
<b>Discontinued Operation</b>					
Cia Metalic Nordeste					
<b>Total</b>	<b>1,278,751</b>	<b>(1,418,282)</b>	<b>48,796</b>	<b>13,611</b>	<b>(77,124)</b>

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				12/31/2017
	Sales	Purchases	Finance income(expenses), net	Total
<b>Joint ventures and Joint Operation</b>				
Itá Energética S.A		(32,275)		(32,275)
MRS Logística S.A.		(934,279)		(934,279)
CBSI - Companhia Brasileira de Serviços e Infraestrutura	55	(150,758)		(150,703)
Transnordestina Logística S.A. (1)	2,549	(7,916)	53,261	47,894
	<b>2,604</b>	<b>(1,125,228)</b>	<b>53,261</b>	<b>(1,069,363)</b>
<b>Other related parties</b>				
Fundação CSN	13	(1,118)		(1,105)
Banco Fibra (2)			6,290	6,290
Usiminas		(427)		(427)
Panatlântica (3)	872,047	(43,949)		828,098
Ibis Participações e Serviços		(5,915)		(5,915)
Other related parties	2,821	(293)		2,528
	<b>874,881</b>	<b>(51,702)</b>	<b>6,290</b>	<b>829,469</b>
<b>Associates</b>				
Arvedi Metalfer do Brasil S,A,	2,660		1,998	4,658
<b>Discontinued Operation</b>				
Cia Metalic Nordeste				
<b>Total</b>	<b>880,145</b>	<b>(1,176,930)</b>	<b>61,549</b>	<b>(235,236)</b>

				12/31/2016	
	Sales	Purchases	Finance income(expenses), net	Foreign exchange and monetary variation, net	Total
<b>Joint ventures and Joint Operation</b>					
Itá Energética S.A		(32,363)			(32,363)
MRS Logística S.A.		(903,030)			(903,030)
CBSI - Companhia Brasileira de Serviços e Infraestrutura	18	(138,374)			(138,356)
Transnordestina Logística S.A. (1)	5,039	(8,505)	55,758		52,292
	<b>5,057</b>	<b>(1,082,272)</b>	<b>55,758</b>		<b>(1,021,457)</b>
<b>Other related parties</b>					



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Fundação CSN		(4,045)			(4,045)
Banco Fibra (2)			(844)	(18,398)	(19,242)
Usiminas	17,027	(6,026)			11,001
Panatlântica (3)	779,503				779,503
Ibis Participações e Serviços	47	(7,370)			(7,323)
Other related parties	3,082				3,082
	<b>799,659</b>	<b>(17,441)</b>	<b>(844)</b>	<b>(18,398)</b>	<b>762,976</b>
<b>Associates</b>					
Arvedi Metalfer do Brasil S,A,	31,026		2,995		34,021
<b>Discontinued Operation</b>					
Cia Metalic Nordeste	43,250	(138)	(130)		42,982
<b>Total</b>	<b>878,992</b>	<b>(1,099,851)</b>	<b>57,779</b>	<b>(18,398)</b>	<b>(181,478)</b>

(1) Transnordestina Logística S.A: Assets: Refers mainly to contracts in R\$: interest equivalent to 125.0% and 130.0% of CDI. On December 31, 2018, the borrowings carrying amounts totaled to R\$706,605 (R\$507,009 as of December 31, 2017).

(2) Banco Fibra S.A: Assets: Refers mainly to Eurobond with Fibra Bank and maturity in february 2028.

(3) Panatlântica:Receivables from the sale of steel products.

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### 19.c) Other unconsolidated related parties

- **CBS Previdência**

The Company is its main sponsor, being a non-profit civil society established in July 1960, primarily engaged in the payment of benefits that supplement the official government Social Security benefits to participants. In its capacity as sponsor, CSN carries out transactions involving the payment of contributions and recognition of actuarial liabilities calculated in defined benefit plans.

- **Fundação CSN**

Nowadays, the Company develops socially responsible policies concentrated in Fundação CSN, of which it is the founder. The transactions between the parties are related to the operational and financial support for Fundação CSN to conduct the social projects, developed mainly in the localities where the Company operates.

- **Banco Fibra**

Banco Fibra is under the control structure of Vicunha Aços S.A., direct controller of the Company and the financial transactions carried out with this bank are limited to movements in checking accounts and financial investments in fixed-income securities.

- **Taquari Asset**

Belonging to the Vicunha Group, Taquari Asset is the group company responsible for managing third-party funds, funds and / or portfolios.

- **Companies under the control of a member of the Company's management**

- Ibis Participações e Serviços Ltda.
- Ibis Agrária Ltda
- Partifib Projetos Imobiliários Ltda.
- Vicunha Imóveis Ltda.
- Vicunha Serviços Ltda.

**19.d) Key management personnel**

The key management personnel with authority and responsibility for planning, directing and controlling the Company's activities, include the members of the Board of Directors and statutory directors. The following is information on the compensation of such personnel and the related balances as of December 31, 2018.

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
		<b>P&amp;L</b>	
Short-term benefits for employees and officers	32,848	39,721	71,852
Post-employment benefits	105	110	306
	<b>32,953</b>	<b>39,831</b>	<b>72,158</b>

**20 SHAREHOLDERS' EQUITY**

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**20.a) Paid-in capital**

Fully subscribed and paid-in capital as of December 31, 2018 and December 31, 2017 is R\$4,540,000 comprising 1,387,524,047 book-entry common shares without par value. Each common share entitles its holder to one vote in Shareholders' Meetings.

**20.b) Authorized capital**

The Company's bylaws in effect as of December 31, 2018 determine that the capital can be raised to up to 2,400,000,000 shares by decision of the Board of Directors.

**20.c) Legal reserve**

This reserve is recognized at the rate of 5% of the profit for each period, as provided for by Article 193 of Law 6,404/76, up to the ceiling of 20% of share capital.

**20.d) Ownership structure**

As of December 31, 2018, the Company's ownership structure was as follows:

			12/31/2018			12/31/2017
	Number of common shares	% of total shares	% of voting capital	Number of common shares	% of total shares	% of voting capital
Vicunha Aços S.A. (*)	679,522,254	48.97%	49.24%	682,855,454	49.21%	50.32%
Rio Iaco Participações S.A. (*)	58,193,503	4.19%	4.22%	58,193,503	4.19%	4.29%
NYSE (ADRs)	284,152,319	20.48%	20.59%	303,590,364	21.88%	22.37%

Other shareholders	358,246,471	25.82%	25.95%	312,493,726	22.52%	23.02%
<b>Total shares outstanding</b>	<b>1,380,114,547</b>	<b>99.47%</b>	<b>100.00%</b>	<b>1,357,133,047</b>	<b>97.81%</b>	<b>100.00%</b>
Treasury shares	7,409,500	0.53%		30,391,000	2.19%	
<b>Total shares</b>	<b>1,387,524,047</b>	<b>100.00%</b>		<b>1,387,524,047</b>	<b>100.00%</b>	

(\*) Controlling group companies.

## 20.e) Treasury shares

The Board of Directors authorized various share buyback programs in order to hold shares in treasury for subsequent disposal and/or cancelation with a view to maximizing the generation of value to the shareholder through an efficient capital structure management, as shown in the table below:

Program	Board's Authorization	Authorized quantity	Program period	Average buyback price	Minimum and maximum buyback price	Number bought back	Share cancelation	Disposal of shares
1º	3/13/2014	70,205,661	From 3/14/2014 to 4/14/2014	R\$ 9.34	R\$ 9,22 and R\$ 9,45	2,350,000		
2º	4/15/2014	67,855,661	From 4/16/2014 to 5/23/2014	R\$ 8.97	R\$ 8,70 and R\$ 9,48	9,529,500		
3º	5/23/2014	58,326,161	From 5/26/2014 to 6/25/2014	R\$ 9.21	R\$ 8,61 and R\$ 9,72	31,544,500		
4º	6/26/2014	26,781,661	From 6/26/2014 to 7/17/2014	R\$ 10.42	R\$ 9,33 and R\$ 11,54	26,781,661		
	7/18/2014			Not applicable	Not applicable		60,000,000 <sup>(1)</sup>	
5º	7/18/2014	64,205,661	From 7/18/2014 to 8/18/2014	R\$ 11.40	R\$ 11.40	240,400		
	8/18/2014						10,446,061 <sup>(1)</sup>	

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				Not applicable	Not applicable			
6º	8/18/2014	63,161,055	From 8/19/2014 to 9/25/2014	R\$ 9.82	R\$ 9,47 and R\$ 10,07	6,791,300		
7º	9/29/2014	56,369,755	From 9/29/2014 to 2/29/2014	R\$ 7.49	R\$ 4,48 and R\$ 9,16	21,758,600		
8º	12/30/2014	34,611,155	From 12/31/2014 to 3/31/2015	R\$ 5.10	R\$ 4,90 and R\$ 5,39	1,841,100		
9º (*)	03/31/2015	32,770,055	From 4/01/2015 to 6/30/2015					
	04/20/2018	30,391,000	From 4/20/2018 to 4/30/2018	Não aplicável	Não aplicável	R\$ 0.00	R\$ 0.00	22,981,500

(\*) There were no share buyback in this program.

(1) In 2014 the Board of Directors approved the cancelation of 70,446,061 treasury shares without change in the Company's share capital.

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(2) In April 2018, the Board of Directors authorized the sale of up to 30,391,000 common shares held in treasury. Until the end of the program, 22,981,500 shares were sold for R\$213,494. The Company. The Company recognized a profit on the sale of the shares in the amount of the amount of R\$32,670.

As of December 31, 2018, the position of the treasury shares was as follows:

Quantity purchased (Units)	Amount paid for the shares	Share price			Market value of shares in 12/31/2018 (*)
		Minimum	Maximum	Average	
7,409,500	R\$ 58,264	R\$ 4.48	R\$ 10.07	R\$ 7.86	R\$ 65,500

(\*) Using the last share average quotation on B3 S.A. - Brasil, Bolsa, Balcão as of September 30, 2018 of R\$ 8.84 per share.

#### 20.f) Policy on investments and payment of interest on capital and dividends

The Company adopts a profit distribution policy which, after compliance with the provisions in Law 6,404/76, as amended by Law 9,457/97, will entail the allocation of all the profit to the Company's shareholders, provided that the following priorities are observed, irrespective of their order: (i) carrying out the business strategy; (ii) fulfilling its obligations; (iii) making the required investments; and (iv) maintaining a healthy financial situation of the Company.

#### 20.g) Earnings/(loss) per share:

Basic earnings per share were calculated based on the profit/loss attributable to the owners of CSN divided by the weighted average number of common shares outstanding during the year, excluding the common shares purchased and held as treasury shares, as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
		<b>Common Shares</b>	
<b>(Loss) profit for the year</b>			
Continued operations	5,074,136	10,272	(925,186)
Discontinued operations	-	-	(9,561)
	<b>5,074,136</b>	<b>10,272</b>	<b>(934,747)</b>
Weighted average number of shares	1,373,250,595	1,357,133,047	1,357,133,047
<b>Basic and diluted EPS</b>			
Continued Operations	3.69498	0.00757	(0.68172)
Discontinued Operations	-	-	(0.00704)
	<b>3.69498</b>	<b>0.00757</b>	<b>(0.68876)</b>

The Company does not hold potential dilutable outstanding ordinary shares that could result in dilution of earnings per share.

## **21 PAYMENT TO SHAREHOLDERS**

The Company's Bylaws provide the distribution of 25% minimum dividends of adjusted net income under the law, to the shareholders. The dividends are calculated in accordance with the Company's Bylaws and in accordance with the Brazilian Corporate Law. The following is the calculation of dividends for 2018:

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**Allocation of profits**

	<b>12/31/2018</b>
<b>Profit for the year</b>	5,074,136
Absorption of deficits	(1,291,689)
Legal reserve	(189,122)
<b>Allocation of profits</b>	<b>3,593,325</b>
<b>Proposed destination:</b>	
Mandatory minimum dividends	(898,332)
Intended for statutory reserve of working capital	(2,694,993)
<b><u>In current liabilities</u></b>	
<b>Dividends to be paid on December 31, 2017</b>	2,209
Mandatory minimum dividends	898,332
<b>Dividends to be paid on December 31, 2018</b>	<b>900,541</b>
Weighted average number of shares	1,373,251
Dividends per share approved	0.65416

The following table shows the history of deliberate and paid dividends:

<b>Approval Year</b>	<b>Dividends</b>	<b>Payment Year</b>	<b>Dividends</b>
2017 (*)	0,00	2017	0,00
2018	898,332	2018	0,00
<b>Total approved</b>	<b>898,332</b>	<b>Total paid</b>	

(\*) There was no resolution on dividend distribution during the year of 2017.

**22 NET SALES REVENUE**

Net sales revenue is comprised as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>Consolidated 12/31/2016</b>
<b>Gross revenue</b>			

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Domestic market	14,752,901	11,487,011	10,206,195
Foreign market	11,817,559	9,980,572	9,571,630
	<b>26,570,460</b>	<b>21,467,583</b>	<b>19,777,825</b>
<b>Deductions</b>			
Canceled sales, discounts and rebates	(234,851)	(262,989)	(190,415)
Taxes on sales	(3,366,724)	(2,679,993)	(2,438,461)
	<b>(3,601,575)</b>	<b>(2,942,982)</b>	<b>(2,628,876)</b>
<b>Net revenue</b>	<b>22,968,885</b>	<b>18,524,601</b>	<b>17,148,949</b>

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**23 EXPENSES BY NATURE**

		<b>Consolidated</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
Raw materials and inputs	(6,759,275)	(5,404,801)	(4,518,718)
Labor cost	(2,743,460)	(2,400,579)	(2,482,111)
Supplies	(1,782,576)	(1,451,437)	(1,384,437)
Maintenance cost (services and materials)	(1,326,894)	(1,145,974)	(1,203,294)
Outsourcing services	(2,368,387)	(2,062,352)	(2,228,786)
Freights	(1,802,541)	(1,362,087)	(1,263,734)
Depreciation, Amortization and depletion (Note 10 and 11) (Note 26)	(1,175,107)	(1,408,765)	(1,278,816)
Others	(905,128)	(591,094)	(495,274)
	<b>(18,863,368)</b>	<b>(15,827,089)</b>	<b>(14,855,170)</b>
<b>Classified as:</b>			
Cost of sales	(16,105,657)	(13,596,141)	(12,640,042)
Selling expenses	(2,263,688)	(1,815,107)	(1,696,896)
General and administrative expenses	(494,023)	(415,841)	(518,232)
	<b>(18,863,368)</b>	<b>(15,827,089)</b>	<b>(14,855,170)</b>

The depreciation, amortization and depletion additions for the year were distributed as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>Consolidated 12/31/2016</b>
Production costs	1,145,793	1,376,862	1,241,425
Sales expenses	5,850	8,851	9,163
General and Administrative Expenses	23,464	23,052	28,228
	<b>1,175,107</b>	<b>1,408,765</b>	<b>1,278,816</b>
Other operating expenses (*)	97,914	44,570	43,681
	<b>1,273,021</b>	<b>1,453,335</b>	<b>1,322,497</b>

(\*) Refers mainly to the depreciation and amortization of paralyzed assets, see note 24.

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**24 OTHER OPERATING INCOME (EXPENSES)**

		<b>Consolidated</b>	
	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
<b>Other operating income</b>			
Indemnities	46,256	6,106	26,871
Rentals and leases	5,430	1,841	1,483
Dividends received	9,188	3,248	567
PIS and COFINS to compensate (1)	1,102,365		
Extemporaneous PIS/COFINS credits			203,504
Contractual fines	3,965	2,970	2,501
Gain on business combination			66,496
Actuarial pension plan	20,983	36,952	48,790
Gain on sale of assets held for sale			252,023
Updated shares – Fair Value through profit or loss (VJR) (Note 13)	1,655,813		
Eletrobrás's compulsory loan (3)		755,151	
Gain on sale of LLC (note 3)	1,164,294		
Debts write off - intragroup			
Other revenues	27,749	18,018	61,274
	<b>4,036,043</b>	<b>824,286</b>	<b>663,509</b>
<b>Other operating expenses</b>			
Taxes and fees	(26,197)	(136,348)	(88,249)
Write-off/(Provision) of judicial deposits	(54,330)	(38,258)	(64,886)
Expenses with environmental liabilities, net	(60,311)	(7,156)	(5,023)
Expenses from tax, social security, labor, civil and environmental lawsuits, net	(59,219)	(95,744)	(151,534)
Contractual fines (2)	(104,086)		(16,624)
Depreciation of equipment paralyzed and amortization of intangible assets (note 23)	(97,914)	(44,570)	(43,681)
Write-off of PP&E and intangible assets (notes 10 and 11)	(27,260)	(28,127)	(88,339)
Estimated (Loss)/reversal in inventories	(149,704)	(15,775)	(29,316)
Studies and project engineering expenses	(33,738)	(32,956)	(31,156)
Research and development expenses	(2,688)	(3,944)	(2,269)
Advisory expenses	(508)	(3,419)	(20,865)
Healthcare plan expenses	(108,369)		(80,489)

		(97,837)	
Reversal/(Provision) industrial restructuring	(17,490)	5,807	96,390
Cash flow hedge realized (Note 13 b)	(370,191)	(92,140)	(77,444)
Impairment of fair value of Transnordestina			(387,989)
Other expenses	(218,701)	(56,477)	(85,256)
	<b>(1,330,706)</b>	<b>(646,944)</b>	<b>(1,076,730)</b>
<b>Other operating income (expenses), net</b>	<b>2,705,337</b>	<b>177,342</b>	<b>(413,221)</b>

(1) Refers to non-inclusion of ICMS in the PIS and COFINS calculation basis, see note nº8.

(2) In 2018, refers to the contractual amendment with the jointly-owned subsidiary MRS, for the revision of the “Anual Transportation Plan”.

(3) This is a net amount, certain and due, arising from the final judicial decision favorable to the Company, which is irreversible and irrevocable, in order to apply the STJ's consolidated position on the subject, which culminated in sentencing the Eletrobrás to the payment of the correct interest and monetary correction of the Compulsory Loan. The final judicial decision, as well as the certainty about the amounts involved in the settlement of the judgment (judicial procedure to request the satisfaction of the right), allowed the conclusion that the right to receive this value is certain. Thus, in line with our legal and accounting advisors, we recognize the credits in noncurrent assets against the result of Other Operating Revenues. The monetary adjustment of 2018 is presented in the note nº25 - Financial Income (Expenses).

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**25 FINANCIAL INCOME (EXPENSES)**

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>Consolidated 12/31/2016</b>
<b>Financial income</b>			
Related parties (note 19 b)	64,888	61,549	60,964
Income from financial investments	111,235	162,292	301,401
Gain from derivative		28,503	5,829
Gain on repurchase of debt securities			146,214
Other income (1)	1,134,391	42,730	129,182
	<b>1,310,514</b>	<b>295,074</b>	<b>643,590</b>
<b>Financial expenses</b>			
Borrowings and financing - foreign currency	(988,821)	(827,841)	(930,508)
Borrowings and financing - local currency	(1,020,867)	(1,610,714)	(2,229,849)
Related parties (note 19 b)	(16,092)		(3,185)
Capitalized interest (notes 10 and 30)	71,611	91,957	215,794
Losses on derivatives			(362)
Interest, fines and late payment charges	(71,100)	(72,343)	(38,002)
Commission and bank fees	(182,179)	(159,088)	(155,249)
PIS/COFINS over financial income	(84,404)	(21,926)	(39,154)
Other financial expenses	19,614	(142,296)	(102,450)
	<b>(2,272,238)</b>	<b>(2,742,251)</b>	<b>(3,282,965)</b>
<b>Inflation adjustment and exchange differences, net</b>			
Inflation adjustments, net	(1,035)	(10,556)	7,865
Exchange rates, net	(532,883)	(5,665)	921,310
Exchange gain (losses) on derivatives	(1)	(229)	(812,227)
	<b>(533,919)</b>	<b>(16,450)</b>	<b>116,948</b>
<b>Financial income (expenses), net</b>	<b>(1,495,643)</b>	<b>(2,463,627)</b>	<b>(2,522,427)</b>
<b>Statement of gains and (losses) on derivative transactions</b>			
Future Dollar			(805,760)
Dollar - to - euro swap	(1)	(229)	(6,467)
	<b>(1)</b>	<b>(229)</b>	<b>(812,227)</b>
Swap Pré x CDI			(299)
Swap CDI x Pré			(63)
Future DI		28,503	5,829
		<b>28,503</b>	<b>5,467</b>

(1) 28,274 (806,760)

(1) Refers mainly to the monetary adjustment of the recognition of the non-inclusion of ICMS in the PIS and COFINS calculation basis of prior years in the amount of R\$ 1,106,097, see note 8.

## 26 SEGMENT INFORMATION

According to the Group's structure, the businesses are distributed and managed in five operating segments as follows:

- **Steel**

The Steel Segment consolidates all the operations related to the production, distribution and sale of flat steel, long steel, metallic containers and galvanized steel, with operations in Brazil, United States, Portugal and Germany. The Segment supplies the following markets: construction, steel containers for the Brazilian chemical and food industries, home appliances, automobile and OEM (motors and compressors). The Company's steel units produce hot and cold rolled steel, galvanized and pre-painted steel of great durability. They also produce tinplate, a raw material used to produce metallic containers.

Overseas, Lusosider, which is based in Portugal, produces cold rolled steel and galvanized steel. CSN LLC in the U.S.A. meets local market needs, import and export of steel products. In January 2012, CSN acquired Stahlwerk Thüringen (SWT), a manufacturer of long steel located in Unterwellenborn, Germany. SWT is specialized in the production of shapes used for construction.

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In January 2014 the production of long steel products started in Brazil and consolidates the company as a source of complete construction solutions, complementing its portfolio of products with high value added in the steel chain.

- **Mining**

This segment encompasses the activities of iron ore and tin mining.

The high quality iron ore operations are located in the Iron Quadrilateral in Minas Gerais, which has its own mines and sells third party iron ore.

At the end of 2015, CSN and the Asian Consortium formalized a shareholders' agreement for the combination of assets linked to iron ore operations and the related logistics structure, forming a new company that has focused in mining of the Group activities from December 2015. In this context, the new company, currently named CSN Mineração S.A., holds the TECAR arraignment, the Casa de Pedra mine and all the shares of Namisa, which was incorporated on December 31, 2015. CSN still owns 100% of Minérios Nacional which includes the mines of Fernandinho (operational), Cayman and Pedras Pretas (mineral resources), all located in Minas Gerais.

Moreover, CSN controls the Estanho de Rondônia S.A., company with mining units and tin casting, in the state of Rondonia.

- **Logistics**

- i. Railroad**

CSN has equity interests in three railroad companies: MRS Logística, which manages the former Southeast Network of Rede Ferroviária Federal S.A. (RFFSA), Transnordestina Logística S.A. and FTL - Ferrovia



Transnordestina Logística S.A., which has the concession to operate the former Northeast Network of the RFFSA in the states of Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco and Alagoas.

**a) MRS**

The railroad transportation services provided by MRS are fundamental to the supply of raw materials and the shipment of final products. The total amount of iron ore, coal and coke consumed by the Presidente Vargas Mill as well as part of the steel produced by CSN for the domestic market and for export are carried by MRS.

The Southeast Brazilian railroad system, encompassing 1,674 kilometers of tracks, serves the tri-state industrial area of São Paulo-Rio de Janeiro-Minas Gerais, in the southeast region, linking the mines located in Minas Gerais to the ports located in São Paulo and Rio de Janeiro, and the steel mills of CSN, Companhia Siderúrgica Paulista, or Cosipa, and Gerdau Açominas. Besides serving other customers, the railroad system carries iron ore from the Company's mines in Casa de Pedra, Minas Gerais, and coke and coal from the Itaguaí Port, in Rio de Janeiro, to Volta Redonda, and carries CSN's export products to the ports of Itaguaí and Rio de Janeiro.

**b) TLSA and FTL**

TLSA and FTL hold the concession of the former RFFSA's Northeast Network. The Northeast Network totals 4,238 km, divided into two sections: i) Network I, which comprises the São Luiz–Mucuripe, Arrojado–Recife, Itabaiana–Cabedelo, Paula Cavalcante–Macau, and Propriá–Jorge Lins (Network I); and ii) Network II, which comprises the Missão Velha–Salgueiro, Salgueiro–Trindade, Trindade–Eliseu Martins, Salgueiro–Porto de Suape, and Missão Velha–Porto de Pecém sections.

The Network links up with the main ports in the region, offering an important competitive advantage by means of opportunities for combined transportation solutions and logistics projects tailored to customer needs.

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## II. Port Logistics

The Port Logistics Segment consolidates the operation of the terminal built in the privatization period after the law of modernization of the ports (law 8.630/1993) that permits to transfer the port logistics activities to the private sector. The Sepetiba terminal features complete infrastructure to meet all the needs of exporters, importers and ship owners. Its installed capacity exceeds that of most other Brazilian terminals. It has mooring berths and a huge storage area, as well as the most modern and appropriate equipment, systems and intermodal connections.

- **Energy**

CSN is one of the largest industrial consumers of electric power in Brazil. As energy is fundamental in its production process, the Company invests in assets for generation of electric power to guarantee its self-sufficiency. These assets are as follows: Itá hydroelectric power plant, in the State of Santa Catarina, with rated capacity of 1,450 MW, where CSN has a share of 29.5%; Igarapava hydroelectric power plant, Minas Gerais, with rated capacity of 210 MW, in which CSN holds 17.9% of the capital; and a thermoelectric co-generation Central unit with rated capacity of 238 MW, which has been operating at the UPV since 1999, that uses the residual gases produced by the steel mill itself.

- **Cement**

The cement division consolidates the cement production, distribution and sale operations, which use the slag produced by the Volta Redonda plant's blast furnaces.

In the second half of 2016, the Company started the operation of a new clinker furnace in Arcos/MG, where the Company already operates a clinker furnace using its limestone of a company-owned mine and also two cement mills in additions to the mills that already operate in Volta Redonda/RJ.

The information presented to Management regarding the performance of each business segment is generally derived directly from the accounting records, combined with some intercompany allocations.

- **Sales by geographic area**

Sales by geographic area are determined based on the customers' location. On a consolidated basis, domestic sales are represented by revenues from customers located in Brazil and export sales are represented by revenues from customers located abroad.

- **Result by segment**

Beginning 2013, the Company no longer proportionately consolidates joint ventures MRS and CBSI. For segment information preparation and presentation purposes, Management decided to maintain the proportionate consolidation of the joint ventures, as historically presented. For consolidated profit reconciliation purposes, the amounts of these companies were eliminated in the column "Corporate expenses/elimination".

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<b>P&amp;L</b>	<b>Steel</b>	<b>Mining</b>	<b>Logistics Port</b>	<b>Railroads</b>	<b>Energy</b>	<b>Cement</b>	<b>Corporate expenses/elimination</b>	<b>C</b>
Metric tons (thou.) (*) (unaudited)	5,068,758	34,780,756						(4,961,345)
Net revenues								
Domestic market	10,328,372	972,360	266,378	1,506,114	410,606	588,230		(2,718,623)
Foreign market	5,305,771	5,012,421						1,297,256
<b>Total net revenue (note 22)</b>	<b>15,634,143</b>	<b>5,984,781</b>	<b>266,378</b>	<b>1,506,114</b>	<b>410,606</b>	<b>588,230</b>		<b>(1,421,367)</b>
Cost of sales and services	(12,613,216)	(3,585,691)	(189,999)	(1,049,071)	(286,734)	(544,266)		2,163,320
<b>Gross profit</b>	<b>3,020,927</b>	<b>2,399,090</b>	<b>76,379</b>	<b>457,043</b>	<b>123,872</b>	<b>43,964</b>		<b>741,953</b>
General and administrative expenses	(984,980)	(144,754)	(35,423)	(106,412)	(27,948)	(95,893)		(1,362,301)
Depreciation (note 23)	609,274	366,547	20,368	258,985	17,285	115,411		(212,763)
Proportionate EBITDA of joint ventures								568,045
<b>Adjusted EBITDA</b>	<b>2,645,221</b>	<b>2,620,883</b>	<b>61,324</b>	<b>609,616</b>	<b>113,209</b>	<b>63,482</b>		<b>(265,066)</b>
<b>Sales by geographic area</b>								
Asia	40,681	4,422,377						1,297,256
North America	1,506,041							
Latin America	369,830							
Europe	3,330,991	590,044						
Others	58,228							
<b>Foreign market</b>	<b>5,305,771</b>	<b>5,012,421</b>						<b>1,297,256</b>
<b>Domestic market</b>	<b>10,328,372</b>	<b>972,360</b>	<b>266,378</b>	<b>1,506,114</b>	<b>410,606</b>	<b>588,230</b>		<b>(2,718,623)</b>
<b>Total</b>	<b>15,634,143</b>	<b>5,984,781</b>	<b>266,378</b>	<b>1,506,114</b>	<b>410,606</b>	<b>588,230</b>		<b>(1,421,367)</b>

P&L	Steel	Mining	Logistics Port	Railroads	Energy	Cement	Corporate expenses/elimination	C
Metric tons (thou.) (*) (unaudited) Net revenues	4,921,719	32,576,843					(5,359,571)	
Domestic market	7,818,552	829,268	238,240	1,416,612	407,671	487,129	(2,491,006)	
Foreign market	5,140,471	3,791,703					885,961	
<b>Total net revenue (note 22)</b>	<b>12,959,023</b>	<b>4,620,971</b>	<b>238,240</b>	<b>1,416,612</b>	<b>407,671</b>	<b>487,129</b>	<b>(1,605,045)</b>	
Cost of sales and services	(10,537,547)	(3,005,840)	(156,997)	(1,024,696)	(285,085)	(512,762)	1,926,786	
<b>Gross profit</b>	<b>2,421,476</b>	<b>1,615,131</b>	<b>81,243</b>	<b>391,916</b>	<b>122,586</b>	<b>(25,633)</b>	<b>321,741</b>	
General and administrative expenses	(963,822)	(158,958)	(27,943)	(94,921)	(27,098)	(80,823)	(877,383)	
Depreciation (note 23)	658,587	490,805	15,752	294,571	17,265	121,801	(190,016)	
Proportionate EBITDA of joint ventures							538,170	
<b>Adjusted EBITDA</b>	<b>2,116,241</b>	<b>1,946,978</b>	<b>69,052</b>	<b>591,566</b>	<b>112,753</b>	<b>15,345</b>	<b>(207,488)</b>	
<b>Sales by geographic area</b>								
Asia	23,364	3,592,226					885,961	
North America	2,009,337							
Latin America	506,951							
Europe	2,564,823	197,701						
Others	35,996	1,776						
<b>Foreign market</b>	<b>5,140,471</b>	<b>3,791,703</b>					<b>885,961</b>	
<b>Domestic market</b>	<b>7,818,552</b>	<b>829,268</b>	<b>238,240</b>	<b>1,416,612</b>	<b>407,671</b>	<b>487,129</b>	<b>(2,491,006)</b>	
<b>Total</b>	<b>12,959,023</b>	<b>4,620,971</b>	<b>238,240</b>	<b>1,416,612</b>	<b>407,671</b>	<b>487,129</b>	<b>(1,605,045)</b>	

P&L	Steel	Mining	Logistics Port	Railroads	Energy	Cement	Corporate expenses/elimination	C
Metric tons (Thou) (*) (unaudited) Net revenues	4,857,174	36,983,297					(4,062,774)	

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Domestic market	6,980,087	542,028	207,722	1,319,907	269,095	490,608	(2,079,534)
Foreign market	4,535,821	4,039,875					843,340
<b>Total Net Revenue (note 22)</b>	<b>11,515,908</b>	<b>4,581,903</b>	<b>207,722</b>	<b>1,319,907</b>	<b>269,095</b>	<b>490,608</b>	<b>(1,236,194)</b>
Cost of sales and services	(9,393,237)	(3,099,236)	(141,542)	(914,361)	(195,994)	(467,373)	1,571,701
<b>Gross profit</b>	<b>2,122,671</b>	<b>1,482,667</b>	<b>66,180</b>	<b>405,546</b>	<b>73,101</b>	<b>23,235</b>	<b>335,507</b>
General and administrative expenses	(914,927)	(185,149)	(25,180)	(83,020)	(25,196)	(74,528)	(907,128)
Depreciation (note 23)	679,074	461,287	13,430	227,792	17,140	73,030	(192,937)
Proportionate EBITDA of joint ventures							502,345
<b>Adjusted EBITDA</b>	<b>1,886,818</b>	<b>1,758,805</b>	<b>54,430</b>	<b>550,318</b>	<b>65,045</b>	<b>21,737</b>	<b>(262,213)</b>
<b>Sales by geographic area</b>							
Asia	30,815	3,519,713					843,340
North America	1,891,865						
Latin America	259,640						
Europe	2,324,580	434,378					
Others	28,921	85,784					
<b>Foreign market</b>	<b>4,535,821</b>	<b>4,039,875</b>					<b>843,340</b>
<b>Domestic market</b>	<b>6,980,087</b>	<b>542,028</b>	<b>207,722</b>	<b>1,319,907</b>	<b>269,095</b>	<b>490,608</b>	<b>(2,079,534)</b>
<b>Total</b>	<b>11,515,908</b>	<b>4,581,903</b>	<b>207,722</b>	<b>1,319,907</b>	<b>269,095</b>	<b>490,608</b>	<b>(1,236,194)</b>

(\*) The ore sales volumes presented in this note take into consideration Company sales and the interest in its subsidiaries and joint ventures.

- Adjusted EBITDA**

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Adjusted EBITDA is the main measurement based on which the chief operating decision maker assesses the segment performance and the capacity to generate recurring operating cash, consisting of profit 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.

Even though it is an indicator used in segment performance measurement, EBITDA is not a measurement recognized by accounting practices adopted in Brazil or IFRS, it does not have a standard definition, and may not be comparable with measurements using similar names provided by other entities.

As required by IFRS 8, the table below shows the reconciliation of the measurement used by the chief operating decision maker with the results determined using the accounting practices:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
Net income / (loss) for the year	5,200,583	111,229	(853,058)
Result from discontinued operations			9,561
Depreciation / amortization / depletion (note 23)	1,175,107	1,408,765	1,278,816
Income tax and social contribution (note 15)	250,334	409,109	266,546
Financial income / (expenses) (note 25)	1,495,643	2,463,627	2,522,427
<b>EBITDA</b>	<b>8,121,667</b>	<b>4,392,730</b>	<b>3,224,292</b>
Other operating (income) / expenses (note 24)	(2,705,337)	(177,342)	413,221
Equity in results of affiliated companies	(135,706)	(109,111)	(64,918)
Proportionate EBITDA of joint ventures	568,045	538,170	502,345
<b>Adjusted EBITDA (*)</b>	<b>5,848,669</b>	<b>4,644,447</b>	<b>4,074,940</b>

(\*) The Company discloses its adjusted EBITDA net of its share of investments and other operating income (expenses) because it understands that these should not be included in the calculation of recurring operating cash generation.

## 27 EMPLOYEE BENEFITS

The pension plans granted by the Company cover substantially all employees. The plans are administered by Caixa Beneficente dos Empregados da CSN ("CBS"), a private non-profit pension fund established in July 1960 which has as members the employees (and former employees) of the Company and some

subsidiaries who joined the fund through an agreement, and the employees of CBS itself. The Executive Officers of CBS is formed by a CEO and two other executive officers, all appointed by CSN, which is the main sponsor of CBS. The Decision-Making Board is the higher decision-making and guideline-setting body of CBS, composed by the president and ten members, six chosen by CSN, and four elected by the fund's participants.

Until December 1995, CBS Previdência administered two defined benefit plans based on years of service, salary and Social Security benefits. On December 27, 1995 the then Private Pension Secretariat ("SPC") approved the implementation of a new benefit plan, effective beginning that date, called Mixed Supplementary Benefit Plan ("Mixed Plan"), structured in the form of a variable contribution plan that was discontinued on September 16, 2013. As of that date, all new employees must join the CBSPrev Plan, structured in the defined contribution modality, created also in September 2013.

As of December 31, 2018 CBS had 34,985 participants (35,176 as of December 31, 2017), of whom 20,872 were active contributors (20,734 as of December 31, 2017), 13,454 were retired employees (13,587 as of December 31, 2017), and 659 were related beneficiaries (855 as of December 31, 2017). Out of the total participants as of December 31, 2018, 11,063 belonged to the defined benefit plan, 11,845 to the mixed plan, 1,028 to the CBSPrev Namisa plan, and 11,049 to the CBSPrev plan.

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The plan assets of CBS are primarily invested in repurchase agreements (backed by federal government securities), federal government securities indexed to inflation, shares, loans and real estate. As of December 31, 2018, CBS held 37,084,031 common shares of CSN (20,143,031 as of December 31, 2017). The total plan assets of the entity amounted to R\$5.3 billion as of December 31, 2018 (R\$5.1 billion as of December 31, 2017). The administrators of the CBS funds seek to match plan assets with benefit obligations payable on a long-term basis. Pension funds in Brazil are subject to certain restrictions regarding their capacity for investment in foreign assets and, therefore, these funds invest mainly in Brazilian securities.

Plan Assets are all available assets and the benefit plans' investments, not including the amounts of debts to sponsors.

For the defined benefit plans, called "35% of the average salary" and "average salary supplementation plan", the Company holds a financial guarantee with CBS Previdência, the entity that administers said plans, to ensure their financial and actuarial balance, in the event of any future actuarial loss or actuarial gain.

As provided for in the prevailing law that governs the pension fund market, for the last 4 years ended (2015, 2016, 2017 and 2018), CSN did not have to pay the installments because the defined benefit plans posted actuarial gains for the period.

## **27.a) Description of the pension plans**

### **Plan covering 35% of the average salary**

This plan began on February 1, 1966 and is a defined benefit plan aimed at paying pensions (for length of service, special situations, disability or old age) on a lifetime basis, equivalent to 35% of the adjusted average of the participant's salary for the last 12 months. The plan also guarantees sick pay to participants on Official Social Security leaves of absence and further ensures payments of savings fund, funeral allowance and pecuniary aid. This plan was discontinued on October 31, 1977 when took effect the average salary supplementation plan.

### **Average salary supplementation plan**

This plan began on November 1, 1977 and is a defined benefit plan aimed at complementing the difference between the adjusted average of the participant's salary for the last 12 months and the Official Social Security benefit for retirement, also on a lifetime basis. As in the 35% plan, there is coverage for the benefits of sick pay, death and pension. This plan was discontinued on December 26, 1995 with the creation of the mixed supplementary benefit plan.

### **Mixed supplementary benefit plan**

This plan began on December 27, 1995 and is a variable contribution plan. Besides the scheduled retirement benefit, it also covers the payment of risk benefits (pension paid while the participant is still working, disability compensation and sick/accident pay). Under this plan, the retirement benefit is calculated based on the amount accumulated by the monthly contributions of the participants and sponsors, as well as on each participant's option for the manner in which they receive them, which can be lifetime (with or without continuity of pension for death) or through a percentage applied to the balance of the benefit-generating fund (loss for indefinite period). After retirement is granted, the plan takes on the characteristics of a defined benefit plan if the participant has chosen to receive his benefit in the form of monthly income for life. This plan was discontinued on September 16, 2013 when the CBS Prev plan became effective.

### **CBS Prev Plan**

The new CBS Prev Plan, which is a defined contribution plan, started on September 16, 2013. Under this plan, the retirement benefit is determined based on the accumulated amount by monthly contributions of participants and sponsors. To receive the benefit, each participant can opt for: (a) receiving part in cash (up to 25%) and the remaining balance through a monthly income through a percentage applied to the benefit-generating fund, not being applicable to death pension benefits, or (b) receive only a monthly income through a percentage applied to the benefit-generating fund.

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With the creation of the CBS Prev Plan, the mixed supplementary benefit plan was discontinued for the entry of new participants as from September 16, 2013.

### **CBSPREV Namisa Plan**

It is a Defined Contribution plan with benefits of risks during the activity (projection of the balances in case of disability or death and sickness / accident allowed). It has been in operation since January 6, 2012, when it was created exclusively for the employees of Nacional Minérios S.A. After the corporate reorganization, which took place in 2016, other Sponsors joined this Plan, among them CSN Mineração S.A.

Under this plan, all the benefits offered are calculated based on the accumulated amount from the monthly contributions of participants and sponsors, and are paid through a percentage applied to the balance of the benefit generating fund. The CBSPREV Namisa Plan is closed since July 2017.

### **27.b) Investment policy**

The investment policy establishes the principles and guidelines that will govern the investments of funds entrusted to the entity, in order to foster the security, liquidity and profitability required to ensure equilibrium between the plan's assets and liabilities based on an ALM (Asset Liability Management) study that takes into consideration the benefits of participants and beneficiaries for each plan.

The investment plan is reviewed annually and approved by the Decision-Making Board considering a five-year horizon, as established by resolution CGPC 7 of December 4, 2003. The investment limits and criteria established in the policy are based on Resolution 3,792/09 published by the National Monetary Council ("CMN").

### **27.c) Employee benefits**

The actuarial calculations are updated at the end of each annual reporting period by outside actuaries and presented in the financial statements pursuant to IAS19 - Employee Benefits.

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2018</b>	<b>Consolidated 12/31/2017</b>
	<b>Actuarial asset</b>		<b>Actuarial liabilities</b>	
Benefits of pension plans	(99,894)	(111,281)	7,982	41,937
Post-employment healthcare benefits	-	-	897,137	866,784
	<b>(99,894)</b>	<b>(111,281)</b>	<b>905,119</b>	<b>908,721</b>

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The reconciliation of employee benefits' assets and liabilities is as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
Present value of defined benefit obligation	3,087,433	3,077,849
Fair value of plan assets	(3,403,906)	(3,305,356)
<b>Deficit(Surplus)</b>	<b>(316,473)</b>	<b>(227,507)</b>
Restriction to actuarial assets due to recovery limitation	224,561	158,163
<b>Liabilities (Assets), net</b>	<b>(91,912)</b>	<b>(69,344)</b>
Liabilities	7,982	41,937
Assets	(99,894)	(111,281)
<b>Net (assets) recognized in the balance sheet</b>	<b>(91,912)</b>	<b>(69,344)</b>

The movement in the present value of the defined benefit obligation during 2018 is as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Present value of obligations at the beginning of the year</b>	<b>3,077,849</b>	<b>2,872,442</b>
Cost of service	1,169	1,285
Interest cost	304,132	322,359
Benefits paid	(280,493)	(284,777)
Actuarial loss/(gain)	(15,224)	166,540
<b>Present value of obligations at the end of the year</b>	<b>3,087,433</b>	<b>3,077,849</b>

The movement in the fair value of the plan assets during 2018 is as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Fair value of plan assets at the beginning of the year</b>	<b>(3,305,356)</b>	<b>(3,193,493)</b>
Interest income	(327,830)	(360,013)
Benefits Paid	280,493	284,777
Return on plan assets (less interest income)	(51,213)	(36,627)
<b>Fair value of plan assets at the end of the year</b>	<b>(3,403,906)</b>	<b>(3,305,356)</b>

The amounts recognized in the income statement for the year ended December 31, 2018, 2017 and 2016 are comprised as follows:

<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
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Cost of current service	1,169	1,285	1,244
Interest cost	304,132	322,359	311,361
Expected return on plan assets	(327,830)	(360,013)	(345,521)
Interest on the asset ceiling effect	16,340	26,843	22,189
	<b>(6,189)</b>	<b>(9,526)</b>	<b>(10,727)</b>
Total unrecognized costs / (income) (*)	-	6	7
Total costs / (income) recognized in the income statement	(6,189)	(9,532)	(10,734)
<b>Total costs / (income), net (*)</b>	<b>(6,189)</b>	<b>(9,526)</b>	<b>(10,727)</b>

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(\*) Effect of the limit of paragraph 58 (b) of IAS19 - Employee *Benefits*.

The cost/(income) is recognized in the income statement in other operating expenses.

The movement in the actuarial gains and losses in 2018, 2017 and 2016 are as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
Actuarial losses and (gains)	<b>(15,224)</b>	<b>166,540</b>	<b>393,743</b>
Return on plan assets (less interest income)	(51,213)	(36,627)	(427,523)
Change in the asset's limit (excluding interest income)	50,058	(97,882)	41,796
	<b>(16,379)</b>	<b>32,031</b>	<b>8,016</b>
Actuarial losses and (gains) recognized in other comprehensive income	(16,379)	32,037	8,023
Unrecognized actuarial (gains)	-	(6)	(7)
<b>Total cost of actuarial losses and (gains) (*)</b>	<b>(16,379)</b>	<b>32,031</b>	<b>8,016</b>

(\*) Actuarial (gain)/ loss results from the fluctuation in the investments comprised in the CBS's asset portfolio.

Breakdown of actuarial gains or losses, according paragraph 141 of IAS19:

	<b>12/31/2018</b>
Loss due to change in demographic assumptions	(139,813)
Loss due to change in financial assumptions	46,917
Loss due to experience adjustments	77,672
Return on plan assets (less interest income)	(51,213)
Change in asset limit (excluding interest income)	50,058
Actuarial losses and (gains)	<b>(16,379)</b>

The main actuarial assumptions used were as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
Actuarial financing method	Projected unit credit	Projected unit credit
Functional currency	Real (R\$)	Real (R\$)
Recognition of plan assets	Fair value	Fair value
	Millennium Plan:	Millennium Plan:
Nominal discount rate	9.69% 9.60% Supplementation: 9.59%	10.42% 10.30% Supplementation: 10.32%
Inflation rate	4.75%	5.00%
Nominal salary increase rate	5.80%	6.05%
Nominal benefit increase rate	4.75%	5.00%
	Millennium Plan: 9.69%	Millennium Plan: 10.42%
	Plan 35%:	Plan 35%:
Rate of return on investments	9.60% Supplementation: 9.59%	10.30% Supplementation: 10.32%
	Millennium Plan: AT-2000 smoothed down by 10% segregated by gender.	Millennium Plan, Plans 35% and Supplementation of Average Salary: AT 2000 segregated by gender (10% smoothed)
General mortality table	Plans 35%: AT-2000 Male aggravated by 15%.	
	Supplementation: AT-2000 aggravated by 10% segregated by gender.	
Disability table	35% Plan and Supplementation: Light Medium. Millenium Plan: Prudential (Ferr. Retirement)	35% Plan and Supplementation: Light Medium. Millenium Plan: Prudential (Ferr. Retirement)
Disability mortality table	Winklevoss - 1%	Winklevoss - 1%
Turnover table	Millenium plan 5% per annum, zero for plans 35% and Supplementation.	Millenium plan 5% per annum, zero for plans 35% and Supplementation.
Retirement age	100% on the first date he/she becomes eligible for programmed retirement benefit under the plan	100% on the first date he/she becomes eligible for programmed retirement benefit under the plan
Household composition of active participants	95% will be married at the time of retirement, with the wife being 4 years younger than the husband	95% will be married at the time of retirement, with the wife being 4 years younger than the husband

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The assumptions related to the mortality table are based on published statistics and mortality tables. These tables represent an average life expectancy in years of employees who retire at the age of 65, as shown below:

	Plan covering 35% of the average salary		Average salary supplementation plan		Mixed supplementary benefit plan (Milênio Plan)	
	12/31/2018	12/31/2017	12/31/2018	12/31/2017	12/31/2018	12/31/2017
<b>Longevity at age of 65 for current participants</b>						
Male	18.00	21.00	18.74	20.45	21.00	21.00
Female	18.00	23.00	22.23	23.02	23.00	23.00
<b>Longevity at age of 65 for current participants who are 40</b>						
<b>Male</b>	40.00	43.00	40.60	42.69	43.00	43.00
<b>Female</b>	40.00	47.00	45.37	46.29	47.00	47.00

Allocation of plan assets:

		12/31/2018		12/31/2017	
Variable income	141,705	4,16%	50,966	1,54%	
Fixed income	3,050,099	89,61%	3,085,783	93,36%	
Real estate	52,091	1,53%	44,083	1,33%	
Others	160,011	4,70%	124,524	3,77%	
<b>Total</b>	<b>3,403,906</b>	<b>100,00%</b>	<b>3,305,356</b>	<b>100,00%</b>	

Variable-income assets comprise mainly CSN shares.



Fixed-income assets comprise mostly debentures, Interbank Deposit Certificates (“CDI”) and National Treasury Notes (“NTN-B”).

Real estate refers to buildings appraised by a specialized asset appraisal firm. There are no assets in use by CSN and its subsidiaries.

For the pension plan, the expense as of December 31, 2018 was R\$40,199 (R\$41,544 and R\$ 35,798 as of December 31, 2017 and 2016, respectively).

**27.d) Expected contributions**

No contributions are expected to be paid to the defined benefit plans in 2018.

For the mixed supplementary benefit plan, contributions in the amount of R\$24,923 are forecasted to be paid in 2018 for the portion of defined contribution and R\$1,987 for the portion of defined benefit (risk benefit).

**27.e) Sensitivity analysis**

The quantitative sensitivity analysis regarding the significant assumptions for the pension plans as of December 31, 2018 is as follows:

	<b>Plan covering 35% of the average salary</b>	<b>Average salary supplementation plan</b>	<b>12/31/2018 Mixed supplementary benefit plan (Milênio Plan)</b>
<b>Assumption: Discount rate</b>			

<b>Sensitivity level</b>	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations	409	(458)	1,650	(1,897)	(502)	316
Effect on present value of obligations	(13,281)	15,342	(70,755)	76,222	(50,666)	54,396
<b>Assumption: Salary growth</b>						
<b>Sensitivity level</b>	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations					252	(223)
Effect on present value of obligations					2,028	(1,792)
<b>Assumption: Benefit adjustment</b>						
<b>Sensitivity level</b>	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations	1,439	(1,350)	7,578	(7,079)	5,720	(5,232)
Effect on present value of obligations	14,685	(13,778)	79,305	(74,101)	57,166	(52,366)
<b>Assumption: Mortality table</b>						
<b>Sensitivity level</b>	1.0%	-1.0%	1.0%	-1.0%	1.0%	-1.0%
Effect on current service cost and on interest on actuarial obligations	(1,052)	1,054	(4,877)	4,845	(1,120)	1,128
Effect on present value of obligations	(10,680)	10,706	(50,807)	50,468	(12,179)	12,165

The forecast benefit payments of the defined benefit plans for future years are as follows:

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<b>Payments</b>	<b>2018</b>
Year 1	244,606
Year 2	252,778
Year 3	269,332
Year 4	265,261
Year 5	271,570
Next 5 years	1,436,738
<b>Total forecast payments</b>	<b>2,740,285</b>

### 27.f) Post-employment health care plan

Refers to a healthcare plan created on December 1, 1996 exclusively for former retired employees, pensioners, those who received an amnesty, war veterans, widows of employees who died as a result of on-the-job accidents and former employees who retired on or before March 20, 1997 and their dependents. Since then, the healthcare plan does not allow the inclusion of new beneficiaries. The plan is sponsored by CSN.

The amounts recognized in the balance sheet were determined as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
Present value of obligations	897,137	866,784
<b>Liabilities</b>	<b>897,137</b>	<b>866,784</b>

The reconciliation of the healthcare liabilities is as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
Actuarial liability at the beginning of the year	866,784	691,262
Expenses recognized in income for the year	85,748	77,269
Sponsor's contributions transferred in prior year	(71,632)	(72,192)
Recognition of actuarial loss/ (gain)	16,237	170,445

<b>Actuarial liability at the end of the year</b>	<b>897,137</b>	<b>866,784</b>
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The actuarial gains and losses recognized in shareholders' equity are as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>12/31/2016</b>
Actuarial gain /(loss) on obligation	16,237	170,445	210,257
<b>Gain/(loss) recognized in shareholders' equity</b>	<b>16,237</b>	<b>170,445</b>	<b>210,257</b>

The weighted average life expectancy based on the mortality table used to determined actuarial obligations is as follows:

	<b>12/31/2018</b>	<b>12/31/2017</b>
<b>Longevity at age of 65 for current participants</b>		
Male	19.55	19.55
Female	22.17	22.17
<b>Longevity at age of 65 for current participants who are 40</b>		
Male	41.59	41.59
Female	45.30	45.30
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The actuarial assumptions used for calculating post-employment healthcare were:

	12/31/2018	12/31/2017
<b>Biometric and Demographic</b>		
General mortality table	AT 2000 segregated by gender	AT 2000 segregated by gender
<b>Financial</b>		
Actuarial nominal discount rate	9.62%	10.34%
Inflation	4.75%	5.00%
Real increase in medical costs based on age (Aging Factor)	0.5% - 3.00% real a.a.	0.5% - 3.00% real a.a.
Nominal increase medical costs growth rate	8.15%	8.41%
Average medical cost (Claim cost)	1,054.65	1,001.69

### 27.g) Sensitivity analysis

The quantitative sensitivity analysis regarding the significant assumptions for the post-employment healthcare plans

as of December 31, 2018 is as follows:

	12/31/2018	
	<b>Healthcare Plan</b>	
	<b>Assumption: Discount rate</b>	
<b>Sensitivity level</b>	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations	909	(992)
Effect on present value of obligations	(35,530)	38,727
	<b>Assumption: Medical Inflation</b>	
<b>Sensitivity level</b>	1.0%	-1.0%
Effect on current service cost and on interest on actuarial obligations	8,091	(6,925)
Effect on present value of obligations	84,560	(72,369)
	<b>Assumption: Mortality table</b>	
<b>Sensitivity level</b>	1.0%	-1.0%
Effect on current service cost and on interest on actuarial obligations	(2,161)	2,148

Effect on present value of obligations	(22,582)	22,451
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The forecast benefit payments of the postemployment healthcare plans for future years are as follows:

<b>Forecast benefit payments</b>	<b>2018</b>
Year 1	78,100
Year 2	80,787
Year 3	83,232
Year 4	85,386
Year 5	87,224
Next 5 years	450,767
<b>Total forecast payments</b>	<b>865,496</b>

## 28 COMMITMENTS

### 28.a) Take-or-pay contracts

As of December 31, 2018 and 2017, the Company was a party to take-or-pay contracts as shown in the following table:

<b>Type of service</b>	<b>Payments in the period</b>					<b>After 2021</b>	<b>Total</b>
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>		
Transportation of iron ore, coal, coke, steel products, cement and mining products.	957,373	406,920	1,024,674	962,399	831,166	3,761,232	6,579,471
Supply of power, natural gas, oxygen, nitrogen, argon and iron ore pellets, coal and clinquer.	563,743	658,166	453,801	40,780	8,419		503,000

Processing of furnace sludge and slag resulting from the production process of pig iron and steel.	8,880	9,467	7,074	7,074	7,074	8,842	30,064
Manufacturing, repair, recovery and production of ingot casting machine units.	52,103	21,533	7,968	3,246	3,246	5,952	20,412
	<b>1,582,099</b>	<b>1,096,086</b>	<b>1,493,517</b>	<b>1,013,499</b>	<b>849,905</b>	<b>3,776,026</b>	<b>7,132,947</b>

**28.b) Concession agreements**FS-93

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Minimum future payments related to government concessions as of December 31, 2018 fall due according to the schedule set out in the following table:

<b>Company / Concession</b>	<b>Type of service</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>After 2021</b>	<b>Total</b>
FTL (Ferrovia Transnordestina Logística)	30 - year concession granted on December 31, 1997, renewable for another 30 years, to develop public service and operating the railway system in northeastern Brazil. The northeastern railway system covers 4.238 Kilometers of railway network and operates in Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Alagoas and Rio Grande do Norte.	9,396	9,396	9,396	50,895	<b>79,083</b>
CSN Mineração S.A.	Concession to operate the TECAR a solid bulk terminal, one of the four terminals that make up the Port of Itaguaí, located in Rio de Janeiro. The concession was renewed and the agreement expires in 2047.	133,021	133,021	133,021	3,458,541	<b>3,857,604</b>
Tecon	25-year concession started in July 2001. On May 10, 2017, was approved the Decree nº 9,048, which changes de concession extension period for port operations. It was established that the requested extension period, added to the initial period, cannot exceed 70	33,779	35,176	36,638	175,053	<b>280,646</b>

years

176,196	177,593	179,055	3,684,489	4,217,333
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## 28.c) Projects and other commitments

- **Transnordestina project**

The Transnordestina project which corresponds to rail network II of the Northeast Railway System, includes building 1,753 km of new, next-generation, wide-gauge tracks. The project posts an evolution of 52% progress which was expected to completion for 2017, completion period currently under discussion with the responsible agencies.

The Company expects that the investments will permit Transnordestina Logística S.A., the concessionaire that holds the Transnordestina project, to transport of several products, such as iron ore, limestone, soy, cotton, sugarcane, fertilizers, oil, and fuel. The concession will expire in 2057, and can be terminated before this date if the minimum return agreed with the Government is reached. Transnordestina has already obtained the required environmental permits, purchased part of the equipment, contracted some of the services, and in certain regions the project is at an advanced implementation stage.

The sources of financing for the project are: (i) financing granted by Banco do Nordeste/ FNE and the BNDES, (ii) debentures issued by FDNE, (iii) Permanent Track Use contracts, and (iv) contribution of capital by CSN and public shareholders. The approved construction investment is R\$7,542,000 and the balance of disburseable funds will be adjusted using the IPCA as from April 2012. Should additional funds be required, they will be provided by CSN and/or third parties under Permanent Track Use contracts.

The budget to conclude the project is under review. Currently, the budget value is composed as follows: Missão Velha-Salgueiro: R\$0.4 billion, Salgueiro-Trindade: R\$0.7 billion, Trindade-Eliseu Martins: R\$2.4 billion, Missão Velha-Porto de Pecém: R\$3 billion, Salgueiro-Porto de Suape: R\$4.7 billion, amounting R\$ 11.2 billion.

The Company guarantees 100% of TLISA's financing granted by Banco do Nordeste/FNE and the BNDES, and 50.97% of the debentures issued by FDNE (includes the corporate guarantee of 48.47%, a collateral letter of 1.25% issued to BNB and the corporate guarantee of 1.25% pledged to BNB). Under the FDNE charter, approved by Federal Decree nº 6,952/2009, and the Investment Agreement entered into with the public shareholders/ financiers, up to 50% of the debentures maybe converted into TLISA shares.

The Court of Auditors of the Union - TCU through a protective order issued in May 2016, regarding the case TC 012.179/2016, suspended new transfers of public resources to TLSA from Valec Engenharia, Construções e Ferrovias S.A., Fundo de Investimento do Nordeste – FINOR, Fundo Constitucional de Financiamento do Nordeste – FNE, Fundo de Desenvolvimento do Nordeste – FDNE, Banco Nacional de Desenvolvimento Econômico e Social – BNDES and BNDES Participações S.A.– BNDESPar. After filing an appeal against the protective order and providing the necessary explanations, in June 2016 the order issued by TCU was withdrawn unanimously by the members of this court, with the continuity of investments planned having been restored.

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By means of another protective order issued in January 2017, relating to the case TC 012.179/2016, the Court of Auditors of the Union suspended new transfers of public resources to TLSA by Valec Engenharia, Construções e Ferrovias S.A., Fundo de Investimento do Nordeste – FINOR, Fundo Constitucional de Financiamento do Nordeste – FNE, Fundo de Desenvolvimento do Nordeste – FDNE, Banco Nacional de Desenvolvimento Econômico e Social – BNDES and BNDES Participações S.A.– BNDESPar. The Company has provided the required clarifications to the TCU and has acted firmly in order that the decision can be repealed soon and the flow of investments planned can be restored. Despite of, ANTT, through Letter 20/2019 / GPFER / SUFER, dated January 21, 2019 and received by TLSA on February 1, 2019, informed the receipt of the review the executive projects of lots 7, 8 and 11 of the MVP section, however, disregarded the review of the projects for extemporaneous. The review of executive projects is essential for the completion of the regulatory budget, and the conclusion of this regulatory budget is a requirement for the TCU to reassess the blocking order of public funding.

There is an administrative procedure with the ANTT (National Land Transportation Agency) which evaluates the regular compliance with the obligations of the Concession Agreement corresponding to System II by Concessionaire TLSA. ANTT's technical area, in a unilateral opinion, understood that non-compliance with the contractual obligations by the Concessionaire is evidenced. The technical area's opinion is under evaluation and, if the irregularity is proven, ANTT may open new process to apply the applicable penalties, among them, forfeiture. The procedure is in fact finding phase and until the moment there is no final decision on the merit.

- **FTL – Ferrovia Transnordestina Logística S.A. (Operational rail network)**

In relation to the rail network I, operates by Ferrovia Transnordestina Logística S.A. (“FTL”) - there is an administrative procedure before the National Agency for Land Transportation (“ANTT”) that analyzes the regular fulfillment of the obligations of the Concession Agreement by the Concessionaire FTL. In view of a unilateral analysis, ANTT informed that FTL would have failed to comply with the TAC (Conduct Adjustment Agreement) signed in 2013 as a result of the non-compliance with the production target for 2013. ANTT decided to file an administrative proceeding to investigate the non-compliance with the concession agreement and, if the irregularity is proved, it can apply the related penalties or recommend the declaration of obsolescence, and the proceeding is at the finding-of-facts stage and, so far, there is no final decision on the merit.

## **29 INSURANCE**

### **3.c) Statement of Cash Flows**

Aiming to properly mitigate risk and in view of the nature of its operations, the Company and its subsidiaries have taken out several different types of insurance policies. Such policies are contracted in line with the CSN Risk Management policy and are similar to the insurance taken out by other companies operating in the same lines of business as CSN and its subsidiaries. The risks covered under such policies include the following: Domestic Transportation, International Transportation, Life and Casualty, Health Coverage, Fleet Vehicles, D&O (Civil Liability Insurance for Directors and Officers), General Civil Liability, Engineering Risks, naming Risks, Export Credit, warranty and Port Operator's Civil Liability.

In 2017, after negotiation with insurers and reinsurers in Brazil and abroad, an insurance policy was issued for the contracting of a policy of Operational Risk of Property Damages and Loss of Profits, with effect from September 30, 2017 to March 31, 2019. Under the insurance policy, the maximum limit of indemnity is US\$600 million and deductibles in the amount of US\$385 million for material damages and 45 days for loss of profits and covers the following Company's units and subsidiaries: Presidente Vargas Steelworks, CSN Mineração and Sepetiba Tecon. Management understands that the policies covers its assets and the risks to which the Company is subject.

In view of their nature, the risk assumptions adopted are not part of the scope of an audit of the financial statements and, accordingly, were not audited by our independent auditors.

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**30 ADDITIONAL INFORMATION TO CASH FLOWS**

The following table provides additional information on transactions related to the statement of cash flows:

	<b>12/31/2018</b>	<b>12/31/2017</b>	<b>Consolidated 12/31/2016</b>
Income tax and social contribution paid	336,962	268,847	456,227
Addition to PP&E with interest capitalization (note 10 and 25)	71,611	91,957	215,794
Acquisition of fixed assets through loans	10,792	4,265	7,437
Non-monetary transaction with joint venture		20,264	
	<b>419,365</b>	<b>385,333</b>	<b>679,458</b>

**31 EVENTS AFTER THE REPORTING PERIOD****Debentures**

- **Tenth issue**

In December 2018, the Company authorized the issuance of 2,000 debentures, in a single series, with collateral and non-convertible debentures, at a par value of R\$ 1, with interest of 126.80% p.a of CDI, with final maturity in December of 2023 and with options for early redemption and optional acquisition, with financial settlement completed on February 1, 2019, totaling R\$ 1,950,000, equivalent to 1,950 debentures effectively subscribed. The proceeds were allocated to (i) the total liquidation and partial amortization of certain Bank Credit Notes entered into with Caixa Econômica Federal (CEF) and (ii) the ordinary management of the Company's business.

- **Prepayment agreement – Sale of iron ore**



In February 20, 2019, the Company has concluded negotiations for the supply of iron ore to Swiss trader Glencore International AG (“Glencore”). The transaction involves a prepayment to CSN Mineração in the amount of US\$ 500,000,000.00 related to an iron ore supply contract of approximately 22 million tons over 5 years. After certain precedent conditions have been met, the disbursement occurred on March 29, 2019.

- **Loan Agreement**

In addition, a loan agreement has been entered into on 15 February 2019 with the Commerzbank Aktiengesellschaft for an amount of EUR 70 million, replacing the current loan agreement.

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