

As filed with the Securities and Exchange Commission on May 17, 2022

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

FORM 20-F

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
- OR
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2021
- OR
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
- OR
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 1-14732

COMPANHIA SIDERÚRGICA NACIONAL
(Exact name of registrant as specified in its charter)
NATIONAL STEEL COMPANY
(Translation of registrant's name into English)

THE FEDERATIVE REPUBLIC OF BRAZIL
(Jurisdiction of incorporation or organization)
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(Address of principal executive offices)

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

<u>Title of each class</u>	<u>Trading symbol</u>	<u>Name of each exchange on which registered</u>
Common Shares without Par Value	*	NYSE
American Depositary Shares (as evidenced by American Depositary Receipts), each representing one share of Common Stock	SID	NYSE

* Not for trading purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the U.S. 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, 2021:

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

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 whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Yes No

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 No

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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” or “US\$” 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, 2021 and 2020 and for the years ended December 31, 2021, 2020 and 2019, together with the corresponding report of our independent registered public accounting firm; and
- “ADSs” are to the American depository shares and “ADRs” are to the American depository receipts representing our common shares.

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 main consumer of our iron ore;
- impacts of the COVID-19 global pandemic and of other global developments on our businesses and on our results of operations, financial situation and cash flows and our ability to timely and efficiently implement measures to address these impacts;
- demand for and prices of steel and mining products;
- the effects of 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;

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- 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;
- downgrades in Brazil's credit ratings;
- changes in laws and regulations affecting mining companies and steel producers, including environmental laws;
- increased operating costs, including labor costs, and increased tariffs, taxes or social contribution costs;
- availability of adequate insurance coverage for our operations; and
- the risk factors discussed under the caption "Item 3. Key Information—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 "aim," "anticipate," "believe," "continue," "estimate," "expect," "intend," "may," "plan," "will" and similar 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 set forth above, 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, 2021 and 2020 and for the years ended December 31, 2021, 2020 and 2019 included elsewhere in this annual report have been presented in thousands of *reais* 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\$5.5805 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2021, as reported by the Central Bank of Brazil, or the Central Bank. As a result of fluctuations in the *real*/U.S. dollar exchange rate, the U.S. dollar selling rate as of December 31, 2021 may not be indicative of current or future exchange rates. The U.S. dollar equivalent information presented in this annual report should not be construed as implying that the *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.

Certain Non-IFRS Financial Measures

This annual report includes certain references to the non-IFRS measures of EBITDA and adjusted EBITDA.

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. 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 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

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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.

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. [Reserved]****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 macroeconomic 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;

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- environmental policies and regulations;
- tax policies and regulations, including frequent changes that may result in uncertainties regarding future taxation; and
- other political, social and macroeconomic 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 by Brazilian companies, including our common shares and the ADSs that represent them.

According to the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*), or the IBGE, Brazil's gross domestic product, or GDP, grew by 1.1% in 2019, sharply contracted by 4.1% in 2020 due to global effects of developments relating to the COVID-19 pandemic and grew by 4.6% in 2021. Developments in the Brazilian economy may affect Brazil's growth rates and, consequently, demand for our products, and we have been, and will continue to be, affected by changes in the Brazilian GDP.

Political instability may adversely affect us.

The Brazilian political environment has historically influenced and continues to influence the Brazilian economy as well as the confidence of investors and the general public, and may result in economic slowdown and price volatility of securities issued by Brazilian companies, including our common shares and the ADSs that represent them.

In particular, over the last decade, the Brazilian capital markets experienced an increase in volatility due to the uncertainty of investigations by the Federal Police and the Federal Prosecutor's Office relating to widespread corruption allegations, including Operation *Lava Jato*. These investigations have affected Brazil's economic and political environment. Numerous members of the Brazilian government and the legislative branch, as well as executives of large public and private companies have been accused of corruption for allegedly accepting bribes in exchange for government concession contracts with companies in the infrastructure, oil, gas and construction sectors, among others. These bribes allegedly financed political party campaigns and were not accounted for or made public, resulting in personal enrichment of the beneficiaries of the corruption scheme. As a consequence, several politicians, including members of Congress and executives of large public and private companies in Brazil, have resigned from their positions and/or been arrested, while others remain under investigation for unethical and illegal conduct identified during these investigations.

The ultimate outcome of these and other investigations remains uncertain, but these investigations have already adversely affected the reputation of the companies involved, as well as the general market perception of the Brazilian economy. There is no guarantee that these ongoing investigations will not lead to further political and economic instability, or whether new allegations against government members, executives and/or public or private companies will emerge in the future.

In addition, any difficulty of the Brazilian government to obtain a majority in Congress could result in congressional deadlock, political unrest and demonstrations and/or strikes that could materially adversely affect our operations. Uncertainties regarding the Brazilian government's implementation of changes in monetary, tax and social security policies, as well as in the relevant legislation, may contribute to economic instability. These uncertainties and new measures may increase the volatility of the Brazilian securities market.

The Brazilian economy is subject to the effects of uncertainty over political developments in Brazil. In 2022, Brazil will hold elections for President, senators, federal deputies and state deputies. Electoral uncertainty could lead to high volatility in Brazilian financial markets, and uncertainty regarding political developments and the policies the Brazilian federal government may adopt or alter may have material adverse effects on the macroeconomic environment in Brazil, as well as on businesses operating in Brazil, including ours.

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

The Brazilian currency has, during the last decade, experienced frequent and substantial variations compared to the U.S. dollar and other foreign currencies. As of December 31, 2019, the U.S. dollar selling rate was R\$4.031 per US\$1.00. In 2020 and 2021, the *real* depreciated against the U.S. dollar and the U.S. dollar selling rate was R\$5.197 per US\$1.00 as of December 31, 2020 and R\$5.581 per US\$1.00 as of December 31, 2021, as reported by the Brazilian Central Bank.

Depreciation of the *real* against the U.S. dollar creates inflationary pressures in Brazil and causes increases in interest rates, which adversely affect the growth of the Brazilian economy as a whole, curtail access to foreign

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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 the 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\$22,190 million, which represents 67.7% of our total indebtedness, as of December 31, 2021.

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 4.3%, 4.5% and 10.1% in 2019, 2020 and 2021, respectively, and 7.3%, 23.1% and 23.1%, 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. The SELIC rate was repeatedly lowered from the October 2016 rate of 14.25% to 2.00% in August 2020 and has since steadily increased. As of December 31, 2019, 2020 and 2021, the SELIC rate was 4.5%, 2.0% and 9.25%, respectively. In February 2022, the SELIC rate was further increased to 10.75%.

Inflation and the Brazilian government's measures to address 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 the 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 the 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.

Further, crises in world financial markets, such as in 2020, as well as global economic challenges that persist as of the date of this annual report could affect investors' views of securities issued by companies that operate in emerging markets. These developments could adversely affect the trading price of our common shares and the ADSs, and could also make it more difficult for us to access the capital markets and finance our operations on acceptable terms, or at all.

Recent global developments relating to Russia's conflict with Ukraine have generated uncertainty in global markets, and U.S. and European stock markets have seen increased price volatility. We cannot predict how these developments will evolve and whether or to what extent they may affect Brazilian capital markets and, consequently, us.

[Table of Contents](#)**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 that 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 materially and adversely affect 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 2021, average iron ore prices increased 46.5% to US\$159.5/dmt, from US\$108.9/dmt in 2020, and in 2020, average iron ore prices increased 16.6% from US\$93.4/dmt in 2019, according to the average Platts Iron Ore Index (62% Fe CFR China). 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 materially and adversely affect 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 2021, China accounted for 73% 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 54% of the global steel production in 2021.

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 adversely affect us. As a result of fiscal and monetary stimuli to counter the effects of the COVID-19 pandemic, China's economic growth accelerated and its GDP increased 8.1% in 2021, as compared to 2.3% in 2020 and 6.1% in 2019.

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. Moreover, 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 are exposed to substantial changes in commodities prices, including oil prices, which significantly affect the prices of our inputs and the prices of our products, and may adversely affect us.

We are subject to volatility in international commodities prices. This volatility affects the prices of certain of our inputs, such as oil, and may therefore adversely affect our results of operations. In 2022 to date, oil prices have increased steeply, largely due to recent global developments relating to Russia's conflict with Ukraine. International commodity price volatility may also affect the prices of our products, thereby having an impact on our pricing strategy, demand for our products and our results of operations.

[Table of Contents](#)***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 39.4%, 42.1% and 37.7% of our total net revenues in 2019, 2020 and 2021, 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 2021, raw material costs accounted for 73.0% 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. Any inability to pass these cost increases onto our customers or to meet our customer demand because of scarcity of our 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.

[Table of Contents](#)***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, which resulted in anti-dumping duties and countervailing duty tariffs issued in 2016. In 2021, the International Trade Commission, or ITC, initiated the five year “sunset reviews” of anti-dumping and countervailing duty orders for both hot-rolled and cold-rolled products. In 2016, the European Commission initiated an anti-dumping investigation of hot-rolled sheets and coils imported from Brazil and other countries, which, in 2017, resulted in anti-dumping duties for the exports of hot-rolled steel products into the European Union from Brazil. In 2021, the European Commission initiated an anti-dumping investigation of electrolytic chromium coated steel (tin free steel) products imported from Brazil and China, which results are expected for the last quarter of 2022. Because we export tin free steel to Europe, the result of this investigation may adversely affect us.

In April 2017, the President of the United States, Donald Trump, requested an investigation under Section 232 of the U.S. Trade Expansion Act to determine if steel imports were harming U.S. national security. As a result of this investigation, in March 2018, the U.S. government implemented Section 232 measures and imposed 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 United States, 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%.

Prompted by the United States’ adoption of Section 232 measures, the European Union initiated, in April 2018, an investigation into safeguards for imports of 26 categories of steel products. In February 2019, a definitive E.U. regulation imposed safeguard measures on imports of hot-rolled, cold-rolled and tin mill products and imposed quotas for the next three years. On February 26, 2021 the European Commission initiated a review investigation to determine whether the E.U. safeguard measures on certain steel products should be extended, which results were published in June 2021. In December 2021, the European Commission initiated another review, which results are expected for June 2022.

For more information on protectionist measures, see “Item 4B. Business Overview—Regulatory Matters—Protectionist Measures.” The imposition of these and other protectionist measures by foreign countries may materially and adversely affect our export sales.

Measures adopted by, or conflicts between, foreign governments could adversely affect us.

Recent global developments relating to Russia’s conflict with Ukraine have generated significant uncertainty in global commodities and financial markets, and the global steel market, among others, has shown indications of instability. Misalignment between supply and demand in the international steel market may adversely affect our pricing strategy, undermine our investment strategy and adversely affect us. Misalignment could result from, among others, international embargoes between governments or suspended international steel production due to significant increases in the prices of raw materials or, in the case of certain companies, proximity to conflict zones.

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

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subsidiaries and our joint ventures that hold concessions will timely comply with our or their obligations under any relevant concession agreement or in conduct adjustment agreements (*Termos de Ajustamento de Conduta*), or TACs, entered into with governmental agencies. In addition, we are subject to supervision and penalties 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 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, licenses or permits 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.

After accidents involving the breaking of upstream mining dams operated by other mining companies in the cities of Mariana and Brumadinho in the state of Minas Gerais, the Brazilian National Mining Agency (*Agência Nacional de Mineração*), or the ANM, which is the regulatory agency under the Ministry of Mines and Energy (*Ministério de Minas e Energia*) of the Brazilian government, and Brazilian environmental regulatory authorities have applied more stringent environmental licensing requirements for mining project operations, specifically for dams.

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.

Further new or more stringent environmental licensing requirements for our project operations, specifically for our dams, could be imposed on us. For additional information on mining regulations in Brazil, see “Item 4. Information on the Company—4B. Business Overview—Regulatory Matters—Mining Regulation.”

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, 2021, our total debt outstanding was R\$32,507.5 million, comprising R\$5,486.8 million of short-term debt and R\$27,020.7 million of long-term debt. We had R\$16,646.5 million in cash and cash equivalents as of December 31, 2021. Our planned investments across our business segments will require a significant amount of cash over the course of 2022 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 2022 and 2023 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 24 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 the 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 in or trends in the credit and

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capital markets generally. As of December 31, 2021, our Fitch, Moody's and S&P credit ratings were BB with a positive outlook, Ba2 with a stable outlook and BB with a positive outlook, respectively.

Credit rating agencies regularly evaluate us and their ratings are based on a number of factors, including our financial strength. We cannot assure you 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 seaports and railways. 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 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 be insufficient to prevent 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 adversely affect our reputation and our interactions with customers, competitors and other third parties, including governmental and regulatory bodies, suppliers and others, and may, among other things, expose us to fines and litigation.

Unauthorized access to or release or violation of our or our business partners' systems and data could materially and adversely affect us.

We are subject to a broad range of cyber threats, including attacks, with varying levels of sophistication. These cyber threats are related to the confidentiality, availability and integrity of our systems and data, including our customers' and business partners' confidential, classified or personal information. In addition, because we have access to certain information technology systems of certain of our business partners, our systems may be subject to attacks aimed at accessing, tampering with or exposing our business partners' systems and their data.

In addition, certain of our business partners, including our suppliers, have broad access to certain of our confidential and strategic information. Many of these business partners face similar security threats and any attacks on their systems could result in unauthorized access to our systems or data. Any unauthorized access to, or release or violation of our systems and data, whether directly or through cyberattacks or similar breaches affecting our business partners, could materially and adversely affect us, including subjecting us to regulatory scrutiny and fines.

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.

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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 S.A., or CSN Mineração, and the container terminal Sepetiba Tecon S.A., or TECON.

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 and/or efficiency, 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, including related to environmental matters, to build or continue a project;
- changes in market conditions, laws or regulations that may result in material additional costs, which may render a project less profitable than expected or economically or otherwise unfeasible;
- service providers' inability to comply with certain legal duties under Brazilian law, including tax, labor and social security, for which we may become liable;
- breach by suppliers, contractors and service providers of their obligations with us; and
- disruptions in our logistics chain caused by third parties, contractual breaches, general operational or geotechnical issues.

Any one or a combination of the factors described above may materially and adversely affect our ability to successfully implement our strategy and, consequently, us.

We are subject to environmental, health and safety incidents and current, new or more stringent regulations 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 (*Área de Relevante Interesse Ecológico – ARIE*) 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 mining, steel and cement industries and an action plan is under development by a technical committee composed of representatives from the government, industry associations and academia.

The state of Rio de Janeiro, through the State Environment Institute (*Instituto Estadual do Ambiente*), or INEA, issued a law that requires steelmaking 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, which is responsible for enacting technical regulations and environmental protection standards, 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

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of Rio de Janeiro relating to this resolution. 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 has imposed and may further impose stricter regulations on our mining operations, including requests for environmental recovery of areas and investments for the granting of mining concessions. Any failure to comply with these or other laws, resolutions and standards may expose us to civil, criminal and administrative liability.

Our operations involve 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, health and safety standards imposed on us could require increased capital expenditures, additional legal preservation areas within our properties or modifications to our operating practices or projects. For further information on environmental regulations and claims, see “Item 4. Information on the Company—4B. Business Overview—Governmental Regulation and Other Legal Matters.”

The amount and timing of expenditures related to environmental, health and safety matters may vary substantially from those currently anticipated. These additional costs may have a negative impact on the profitability of the projects we intend to implement or may make such projects economically unfeasible. 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, delays in obtaining environmental or other operating licenses, 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 legal, 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 members of our management, 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 certain 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, 2021, our internal control over financial reporting is effective.

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Certain of our operations depend on joint ventures, strategic alliances and consortia, among 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) a strategic alliance with an Asian consortium at our controlled investee CSN Mineração to mine iron ore; (ii) a concession jointly held 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 concession jointly held 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., or Engie Brasil, and Companhia de Cimento Itambé, or Itambé, at Itá Energética S.A., or ITASA, to produce electricity; and (v) a consortium with L.D.R.S.P.E Geração de Energia e Participações, 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 joint ventures, strategic alliances and consortia assume that our partners will observe their obligations to make capital contributions, purchase products and, in certain 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 phase 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 and processing facilities and set up the infrastructure required for greenfield properties; and
- obtain the ore or extract the minerals from the ore.

If a mining project proves to not 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 reserves and mine life may prove inaccurate, market price fluctuations and cost changes may render certain ore reserves uneconomical to mine and we may face rising extraction costs or investment requirements over time as our reserves deplete.

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

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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 of our dry tailings processes. 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 4. Information on the Company—4B. Business Overview—Our Mining Segment—Mineral Reserve.”

Our subsidiary CSN Mineração intends to invest in the increase of the total iron ore processing capacity of its facilities and it may not necessarily complete these investments as planned and/or effectively achieve the production volume corresponding to the planned total iron ore processing capacity.

Our subsidiary CSN Mineração included in its business plan certain investments to increase its iron ore processing capacity in the medium and long term. The expansion of its production capacity involves significant investment and expenses and may not result in the effective expansion of its iron ore production, which depends on other additional factors, including the expansion of its mineral reserves. Moreover, these investments to increase its processing capacity are subject to numerous risks inherent to mining projects.

CSN Mineração has planned investments for the expansion of its iron ore processing capacity from 33 million tons per year in 2021 to up to 108 million tons per year by 2033. These numbers represent expected production capacity of CSN Mineração’s facilities following the implementation in full of its current business plan – not its production volume. We can provide no assurances that CSN Mineração’s production volume will effectively reach 108 million tons per year by 2033.

If CSN Mineração is unable to transform its iron ore processing capacity into effective iron ore production, it may not obtain the expected return on investments made, which may adversely affect us.

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

Extreme weather conditions, such as heavy rainfall or flooding, could reduce the available supply of our raw materials and increase our raw materials costs, as well as delay and otherwise disrupt our operations, including relating to logistics. Additionally, we are subject to technical or physical risks including fire, power loss, water supply loss, leakages, accidents and failures in telecommunications and information technology systems, whether resulting from natural or other disasters or otherwise, 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 consummate acquisitions or to integrate them 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, including related to labor or environmental matters, 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 antitrust authorities in 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 adversely affect us.

[Table of Contents](#)***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 adversely affected by the pricing environment for our products, the exchange rate environment and the effects of weak macroeconomic conditions in Brazil. We are considering certain measures to improve our liquidity and debt profile, including the potential sale of certain assets. In addition, we are negotiating the extension of certain of our credit facilities. If we are unable to successfully sell certain assets and/or extend our debt amortization profile, we may not be able to maintain adequate liquidity and 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 risks of litigation.

We are and may be a party to legal proceedings and judicial, administrative or arbitration claims. For certain 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 counsels' judgment as to the likelihood of an outcome unfavorable to us. Although we are contesting existing 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. In addition, certain judicial or administrative proceedings may adversely affect our shareholders and holders of the ADSs, specifically their receipt of dividends.

The outbreak of communicable diseases such as the ongoing COVID-19 global pandemic may affect investment sentiment, cause operational disruptions and result in volatility in global markets.

The outbreak of communicable diseases such as the ongoing COVID-19 global pandemic may affect investment sentiment, cause operational disruptions and result in volatility in global markets, which may materially and adversely affect our customers, our suppliers and us. Quarantines and government measures may restrict certain economic activities in affected regions globally, including Brazil, resulting in reduced business volume, disrupted production and operations and temporary closures of our or other companies' facilities.

There remains uncertainty regarding the duration of disruptions deriving from the COVID-19 pandemic, including variants of the virus, the extent of government intervention or other measures and economic effects on the stock market, foreign exchange rates, unemployment rates, interest rates and otherwise. The extent to which the COVID-19 global pandemic will affect us depends on future developments that are highly uncertain and cannot be predicted as of the date of this annual report.

The effect of any discontinuation or replacement of the LIBOR may adversely affect us.

The U.K. Financial Conduct Authority announced in July 2017 that it would no longer compel banks to submit rates for the calculation of the London interbank offered rate, or LIBOR, after 2021. To mitigate any possible impact, various regulators have proposed alternative reference rates. As of December 31, 2021, we had R\$5,450 million of LIBOR-indexed financings maturing beginning in 2022. We cannot predict the effect of any discontinuation or replacement of the LIBOR at this time and, consequently, we cannot assure you that these changes will not have an adverse effect on us.

Risks Relating to Our Common Shares and the 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

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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 or the 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 our common shares into non-Brazilian currency and remit the proceeds abroad. Pursuant to Resolution No. 4,373, dated September 29, 2014, of the Brazilian National Monetary Council (*Conselho Monetário Nacional*), or the CMN, in order for an investor to surrender ADSs for the purpose of withdrawing the common shares represented thereby and be entitled to trade the underlying common shares directly on the B3 S.A. – *Brasil, Bolsa, Balcão*, or 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 is responsible, among other things, for keeping and updating the investors' certificates of registration 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 your representative fails to obtain or update the relevant certificates of registration, you may incur in additional expenses or be subject to operational delays which could affect your ability to receive dividends or distributions relating to our common shares or the return of your capital in a timely manner. The custodian's certificate of registration or any foreign capital registration directly obtained by you may be affected by future legislative or regulatory changes, and we cannot assure you that additional restrictions applicable to you, 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 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—10E. 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 other developed countries, 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 and other developed countries. There is also significantly greater concentration in the Brazilian securities market than in major securities markets in the United States and other developed countries. The ten largest companies in terms of market capitalization represented 48.7% of the aggregate market capitalization of the B3 as of December 31, 2021. 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.

[Table of Contents](#)**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 the depository of the ADSs 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, see “Item 10. Additional Information—10B. Memorandum and Articles of Association—Description of Capital Stock—Preemptive Rights.”

A decrease in our market capitalization may increase volatility in the trading price of our common shares and the ADSs.

In recent years, our market capitalization has been volatile, resulting in increased volatility in the trading price of our common shares and the ADSs. Any decrease in our market capitalization may further increase this volatility. If the trading price of the ADSs drops below the levels required by the listing standards of the New York Stock Exchange, or the 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 the NYSE’s listing standards.

The trading price of the ADSs decreased in 2021 and, as of December 31, 2021, presented a variation of (27)% as compared to their trading price as of December 31, 2020.

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 Getulio 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 limestone and dolomite.

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

Between 1993 and 2002, we implemented a capital improvement program aimed at increasing our annual production of crude steel, improving the quality of our products, and enhancing our environmental protection and cleanup programs. As part of these investments, since February 1996, all our production involves continuous casting, which requires lower energy use and results in decreased metal loss as compared to ingot casting. From 1996 until 2002, we invested the equivalent of US\$2.4 billion in our capital improvement program and on maintaining our operational capacity, culminating with the renovation of our blast furnace no. 3 at the Presidente Vargas Steelworks and Hot Strip Mill No. 2 in 2001.

In 2007, we started to sell iron ore in the seaborne market. Today, we, through our subsidiary CSN Mineração, are 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 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 Steelworks in Volta Redonda, in the state of 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

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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.

In 2019, investments of approximately R\$250.0 million in the maintenance of blast furnace no. 3 increased its steel production capacity by 500,000 tons per year.

In 2020, we invested R\$848.0 million in our steel segment, R\$710.0 million in our mining segment and approximately R\$140.0 million in our other segments. In early 2021, CSN Mineração completed its initial public offering, and its shares are now traded on the B3.

In 2021, we reached historically high net revenue and EBITDA and announced our acquisitions of Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda., which operate in the Northeast region of Brazil, and LafargeHolcim (Brasil) S.A. (the latter, as of the date of this annual report, pending approval by the Brazilian antitrust authority (*Conselho Administrativo de Defesa Econômica*), or CADE). With these acquisitions, we will be the second largest cement producer in Brazil, with a total installed capacity of 16.3 million tons per year. In addition, we announced the acquisition of Metalgráfica Iguaçu S.A., which, operating in Ponta Grossa, in the state of Paraná, and Goiânia, in the state of Goiás, produces steel cans for the national and international market of metal food packaging, as a strategic step to expand the production capacity of our packaging division. This acquisition was approved by CADE in April 2022 and we expect closing to occur by the end of the first half of 2022.

General

We are one of the largest fully integrated steel producers in Brazil and Latin America in terms of crude steel production. We operate throughout the entire steel production chain, from the mining of iron ore to the production and sale of a diversified range of high value-added steel products. We divide our business into five segments: steel, mining, cement, logistics and energy.

Steel

Our steel segment comprises a portfolio of diverse products and provides us an international footprint by means of our international subsidiaries and our exports from Brazil. In our flat steel segment, we are an almost fully integrated steelmaker. Our main industrial facility, Presidente Vargas Steelworks, produces a broad line of steel products, including slabs, hot and cold-rolled, galvanized and tin mill products for the distribution, packaging, automotive, home appliance and construction industries.

Our production process is based on the integrated steelworks concept. Our current annual crude steel capacity and rolled product capacity at Presidente Vargas Steelworks is, in each case, 5.6 million tons.

We 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 operate in the long steel segment through SWT in Germany, with annual production capacity of approximately 1.1 million tons of steel sections.

We own and operate a plant in Volta Redonda for production of long steel products. 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 subsidiary 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

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Acima and Congonhas, respectively, pertaining to our wholly owned subsidiary Minérios Nacional S.A., or Minérios Nacional.

Our mining assets also include (i) the solid bulks cargo terminal 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 ERSÁ, located in the city of Ariquemes, in the state of Rondônia, which mines and casts tin.

We sold 34.9 million tons, 26.9 million tons and 28.3 million tons of iron ore to third parties in 2019, 2020 and 2021, 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

We entered the cement market in 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.

In August 2021, our cement subsidiary, CSN Cimentos S.A., or CSN Cimentos, acquired Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda., which operate in the Northeast region of Brazil. This acquisition increased our cement production capacity by 1.3 million tons, from 4.7 million tons to 6.0 million tons.

In September 2021, our cement subsidiary, CSN Cimentos, entered into a share purchase and sale agreement to acquire the entirety of LafargeHolcim (Brasil) S.A., at a base value of US\$1,025.0 million, subject to certain price adjustments. This acquisition, once consummated, will add 10.3 million tons of cement per year to our production capacity, bringing our total production capacity to 16.3 million tons of cement per year, by means of plants strategically located in the Southeast, Northeast and Midwest regions of Brazil, as well as substantial high-quality limestone reserves. As of the date of this annual report, the consummation of this acquisition remains subject to approval by CADE.

Electricity

Steelmaking requires significant amounts of electricity to power rolling mills, production lines, hot metal processing, coking plants, cryogenic plant and auxiliary units. In 2021, our Presidente Vargas Steelworks consumed approximately 2.4 million MWh of electrical energy.

Our main source of electricity is our thermoelectric co-generation power plant at the Presidente Vargas Steelworks, which is fueled by gas from the steel production process, with 267 MW of installed capacity.

In addition, we hold a 29.50% equity interest in the Itá hydroelectric facility in the state of Santa Catarina, through a 48.75% equity interest in ITASA and a 17.92% equity interest in the Igarapava hydroelectric facility. Through these equity interests, we have secured an average of 185 MW in annual power supply for our operations under power purchase agreements at a fixed price per MW hour, adjusted annually according to ITASA's board decision. At the end of 2021, ITASA's board of directors decided it would not implement any price adjustments for 2022.

[Table of Contents](#)**Recent Developments*****New Notes Issuance and Concurrent Tender Offer***

In February 2022, we issued US\$500.0 million in aggregate principal amount of 5.875% senior notes due 2032, through CSN Resources S.A., our Luxembourg finance subsidiary, CSN Resources S.A. We used a portion of the proceeds from this issuance to purchase US\$300.0 million in aggregate principal amount of outstanding 7.625% senior notes due 2026 pursuant to a concurrent tender offer.

CSN Cimentos' Approval of Debentures

In March 3, 2022, CSN Cimentos issued R\$1,200.0 million in aggregate principal amount of non-convertible debentures that underlie real estate receivables certificates (*certificados de recebíveis imobiliários*), or CRI, issued by Virgo Companhia de Securitização. Upon issuance, Virgo Companhia de Securitização subscribed all debentures and issued real estate receivables certificates to investors, which receivables will be paid by funds from CSN Cimentos' payments on the debentures.

Acquisitions of Santa Ana Energética S.A. and Topázio Energética S.A.

In April 2022, CSN Cimentos and CSN Energia entered into a share purchase and sale agreement to acquire the entirety of the shares issued by Santa Ana Energética S.A., which holds the concession for the hydroelectric power plant of Santa Ana, and Topázio Energética S.A., which holds, through its subsidiary Brasil Central Energia Ltda., the concession for the hydroelectric power plant of Sacre II. As of the date of this annual report, this acquisition is pending approval by CADE.

Dividends

In April 2022, our annual shareholders' meeting approved a distribution of R\$904 million in mandatory minimum dividends and CSN Mineração's annual shareholders' meeting approved a distribution of R\$2,520 million in additional dividends, in each case to be paid by December 31, 2022.

Other Information

Our legal and commercial name is Companhia Siderúrgica Nacional. We are organized under the laws of the Federative Republic of Brazil with head offices located at Av. Brigadeiro Faria Lima, 3400, 19th and 20th floors, Itaim Bibi, São Paulo, Brazil, CEP 04538-132, and our telephone number is +55 (11) 3049-7100. Our agent for service of process in the United States is Cogency Global Inc., located at 10 E. 40th Street, 10th Floor, New York, New York 10016. Our website is 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 invested significantly in our mining business, placing us 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 38.5 million tons in 2019, 31.2 million tons in 2020 and 33.2 million tons in 2021 of iron ore. 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 (i) shipments of 45 million tons per year of iron ore and (ii) landings of 4.0 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.

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 customers. Our steelworks are close to the main steel consumer

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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, directly and indirectly, as of December 31, 2021, a total of 34.94% (or 37.27% before non-controlling interest) 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.

Energy generation. We generate power through our hydroelectric facilities of Itá and Igarapava, as well as our thermoelectric plant located inside Presidente Vargas Steelworks, which allow us to benefit from reduced energy tariffs. We sell excess energy we generate in the energy market on a spot basis. Our 235 MW thermoelectric cogeneration plant can provide 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 29.50% equity interest in the Itá hydroelectric facility in the state of Santa Catarina, through a 48.75% equity interest in ITASA, and a 17.92% equity interest in the Igarapava hydroelectric facility. Through these equity interests, we have secured an average of 185 MW in annual power supply for our operations under power purchase agreements at a fixed price per MW hour, adjusted annually according to ITASA's board decision. At the end of 2021, ITASA's board of directors decided it would not implement any price adjustments for 2022.

Low cost structure. As a result of our fully integrated business model, our thoroughly developed transportation infrastructure and our 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 in 2021 of approximately 25.3% 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 aggregate sales accounted for approximately 28.5% of our total flat steel sales in 2021. 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 2021, SWT accounted for 16.1% of our total sales, representing 740,000 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;
- Investments in technology startups and other disruptive companies through our subsidiary CSN Inova Ventures, in order to foster innovation and efficiency;
- Geographical diversification through our flat and long steel facilities abroad and our focus on diversifying our exports through, among others, coated steels;

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- Constant pursuit of operational excellence by developing and implementing cost reduction projects, including energy efficiency, and process review programs, including internal logistics optimization, project development and implementation discipline;
- Exploring marketing and commercial synergies through our flat steel distribution network and product portfolio to accelerate our entrance into the domestic long steel market; and
- Increased customized services and distribution abilities through our expanding distribution network.

Mining

In order to strengthen our position in the iron ore market, we plan to invest in our mining assets, including through 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 recent price appreciation in the global iron ore market, our focus is to export high-quality iron ore at optimal margins without affecting the balance of supply and demand in the transoceanic market. To sustain this growth, we plan to increase TECAR's capacity from 45 million tons per year in 2021 to 60 million tons per year in 2025.

This expansion will be funded by CSN Mineração's issuance of debentures in August 2021 (see "Item 5. Operating and Financial Review and Prospects—5B. Liquidity and Capital Resources—Sources of Funds and Working Capital—Debt Maturity Profile") and future issuances of debentures or other debt instruments.

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

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-customers.

In addition to our bulk terminal TECAR, our TECON container terminal has a capacity of 660,000 TEUs (Twenty-Foot Equivalent Units) per year.

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. Because MRS will primarily use its own operating income and other funding strategies to invest in its expansion projects, these investments will not require material capital expenditures by us.

Cement

Our cement business strategy involves the use of the limestone reserves in our Bocaina mines and the slag generated by our blast furnaces at Volta Redonda. Our first cement grinding mill was inaugurated in 2009, with a capacity to produce 2.4 million tons per year. In 2011, we began producing clinker in the Arcos plant, which provided lower production costs. In 2015, we inaugurated two grinding mills, and in 2016, we concluded a new kiln line with a capacity of 6,500 tons per day, reaching an aggregate capacity of 4.7 million tons per year. We plan to focus on the expansion of our cement business through increased production by means of greenfield and brownfield projects, as well as possible acquisition opportunities. The focus of our cement sales strategy is on the retail segment, which operates with a low level of inventory and for which our distribution centers provide a competitive advantage.

In August 2021, our cement subsidiary, CSN Cimentos, acquired Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda., which operate in the Northeast region of Brazil. This acquisition increased our cement production capacity by 1.3 million tons, from 4.7 million tons to 6.0 million tons.

In September 2021, CSN Cimentos entered into a share purchase and sale agreement to acquire the entirety of LafargeHolcim (Brasil) S.A., at a base value of US\$1,025.0 million, subject to certain price adjustments. This acquisition, once consummated, will add 10.3 million tons of cement per year to our production capacity, bringing our total production capacity to 16.3 million tons of cement per year, by means of plants strategically

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located in the Southeast, Northeast and Midwest regions of Brazil, as well as substantial high-quality limestone reserves. As of the date of this annual report, the consummation of this acquisition remains subject to approval by CADE.

These acquisitions are part of our strategy of inorganic expansion of our cement operations, geographical diversification and consolidation as one of the largest players in the cement industry in Brazil.

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 continue to evaluate business opportunities 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 our investment in Usinas Siderúrgicas de Minas Gerais S.A., or Usiminas.

Description of our Operating Segments***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 slit 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

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processes used to protect steel against corrosion caused by exposure to water and the atmosphere. Galvanized products are highly versatile and can be used to manufacture a broad range of products, such as:

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

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

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

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

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

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

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.

[Table of Contents](#)*Quality Management System*

We maintain a quality management system that is certified to comply with the International Standardization Organization, or ISO, 9001:2015 standard and the automotive industry's International Automotive Task Force, or IATF, standard 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. We maintain product certifications for hot-rolled steel in accordance with European Standards EN10025 and regulation (EU) no. 305/2011, CE Mark, and for the supply of steel wires and bars intended for reinforcing of concrete structures in accordance with applicable Brazilian regulations.

Production Output

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

	<u>Brazil</u>	<u>CSN</u>	<u>CSN % of Brazil</u>
	3.5	3.5	3.5%
2021	36.0	4.0	11.1%
2020	30.9	3.5	11.3%
2019	32.2	2.8	8.7%

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

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

	<u>2019</u>	<u>2020</u>	<u>2021</u>
		(in millions of tons)	
Production of:			
Molten steel	2.9	3.6	4.2
Crude steel	2.8	3.5	4.0
Hot-rolled coils and sheets	3.4	3.5	4.0
Cold-rolled coils and sheets	2.3	2.4	2.5
Galvanized products	1.5	1.5	1.5
Tin mill products	0.4	0.4	0.4

(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 that we buy from third parties is pellet. For more information, see “—Our Mining Segment.”

Coal

In 2021, our metallurgical coal consumption was 1.55 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 2021 was 0.56 million tons, all of which was imported. The sources of the hard coking coal consumed in our plants in 2021 were: United States (67.1%), Australia (31.1%), Mozambique (0.3%) and Canada (1.4%); and for PCI, Russia (98.2%) and Colombia (1.1%). We maintained a long-term contract for coal supply with a Russian company, pursuant to which all coal from Russia for our operations in 2022 has been in stock since the beginning of the year. As of the date of this annual report, we are seeking other coal supplier options.

[Table of Contents](#)Coke

In 2021, in addition to the approximately 0.66 million tons of coke we produced, we also consumed 1.39 million tons of coke bought from third parties in China, Japan, India and Colombia, which represented an increase of 37.7% as compared to our consumption in 2020.

Limestone and Dolomite

Our Bocaina Mine is located in the city of 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. Limestone is used in the production of various products, including clinker and cement.

The annual production of limestone and dolomite for our steelworks is approximately 5.9 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 annual contracts. We purchase part of our tin from our subsidiary ERSÁ. We maintain approximately 34, 21 and 29 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 2021, we used 657,025 tons of oxygen in the Presidente Vargas Steelworks site.

Water

We require large quantities of water in the production of steel. Water serves as a solvent, a catalyst and a cleaning agent. It is also used to cool, carry waste, 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 93.8% 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\$1.77 million.

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. Naturgy (formerly Companhia Estadual de Gás do Rio de

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Janeiro S.A.) is our major source of natural gas. To secure natural gas supply, we maintain a “take-or-pay” agreement with Naturgy, 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. In 2021, the Presidente Vargas Steelworks consumed 462.68 million cubic meters of natural gas.

Diesel Oil

We maintain 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 2021, our diesel oil consumption was 47,730 kiloliters, used to produce 28.1 million tons of iron ore, for which we paid R\$194.6 million. For more information, see “Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—We are exposed to substantial changes in commodities prices, including oil prices, which significantly affect the prices of our inputs and the prices of our products, and may adversely affect us.”

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 2019, 2020 and 2021, we consumed 678,118 tons, 75,971 tons and 207,344 tons, respectively, of third party slabs.

Following are our main raw materials suppliers:

<u>Main Suppliers</u>	<u>Raw Material</u>
Ternium	Slabs
BHP, Contura, Carbo One Limited, Vale, Warrior and Trafigura	Coal
CI Milpa, Sinochem, Noble and Trafigura	Coke
Ibrame, Latasa, and Nova Metais	Aluminum
Votorantim Metais, Reciclyn, Zinco Ligas, Latasa and Trafigura	Zinc
ERSA and Melt Metais	Tin
Sotreq, Minas Máquina, Komatsu, Inova and WLM	Spare parts
RHI Magnesita, Vesuvius and Saint Gobain	Refractory bricks
Ipiranga and Cosan	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, three of which are in operation, and six electrolytic tinning lines, three of which are in operation.

The annual production capacity of steel at the Presidente Vargas Steelworks is 5.2 million tons.

Downstream FacilitiesCSN 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 295,000 tons of galvanized products and Galvalume® products, 131,000 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 384,000 tons of pickled hot-rolled coils in excess of the coils required for the coating process.

[Table of Contents](#)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 354,000 tons of tailored blanks, sheets and narrow strips, which can use cold-rolled or galvanized steel as a substrate.

Companhia Metalúrgica Prada and Prada Distribuição

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 five industrial facilities located in the states of São Paulo, Minas Gerais, Rio de Janeiro and Rio Grande do Sul and in the city of Brasília. 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 products. Companhia Metalúrgica Prada has important customers in the food and chemical industries, including packages of vegetables, fish, dairy products, meat, aerosols, infant nutrition and other business activities.

Prada Distribuição is one of the leaders in the Brazilian distribution market for steel products with 600,000 tons per year of installed processing capacity. Prada Distribuição has two steel service centers and three distribution centers strategically located in the Southeast region of Brazil. The service centers are located in the city of Mogi das Cruzes, in the state of São Paulo, and in the city of Valença, in the state of Rio de Janeiro. Its product mix also includes sheets, slit coils, sections, tubes and roofing in standard or customized format, according to customers' 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.

Lusosider Aços Planos S.A., or Lusosider, is a flat steel processing facility located in Seixal, near Lisbon, Portugal. Lusosider has the capacity to produce approximately 105,000 tons of hot-rolled pickled coils, 36,000 tons of cold-rolled steel products and 276,000 tons of galvanized steel products per year. Its main customers include service centers and tube making industries.

CSN Distribuição

We have one service center, located in the city of Camaçari, in the state of Bahia, 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.

CSN Cut and Bend

We have one service center, located in the city of Vargem Grande Paulista, in the state of São Paulo, to support sales in the Southeast region of Brazil.

SWT Long Steel Mill

In February 2012, we acquired SWT in Germany, which marked our entry 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. The following table sets forth SWT's production:

	2019	2020	2021
Production of:			
Beam blank (crude steel)	844	812	811
Long steel (finished products)	789	769	748

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. The following table sets forth SWT's capacity:

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

Raw Materials

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 2021 was 0.92 million tons, as compared to 0.91 million tons in 2020. Scrap accounted for approximately 72% and 58% of our production costs in 2021 and 2020, respectively, mainly due to a 64% price increase. 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 that 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

Our production of steel also requires the use 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 five 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 447 GWh of electric energy and 404 GWh of natural gas annually.

Suppliers

We acquire the inputs necessary for the production of our products globally. The following table sets forth our main raw materials suppliers:

Main Suppliers	Raw Material
Scholz, TSR	Scrap
RWE Supply & Trading GmbH	Electric energy
Total Energie Gas GmbH	Natural gas
Refractories Site Service GmbH	Refractory
Graffec, W.A.S., SHOWA DENKO	Electrodes
Siemens, Schneider, Voith	Spare parts
Irl. Walzengießerei Coswig	Rolls

[Table of Contents](#)Volta Redonda Long Steel Mill

Our Volta Redonda plant for the production of long steel products comprises a 50 ton electric arc steelmaking furnace, 50 ton ladle furnace, continuous casting machine for billets and a hot rolling mill for wire rod and reinforcing bar. This plant is operational and its production increases annually, providing the Brazilian market with products for civil construction and high quality drawing and cold heading applications. In addition to our operational performance improvements, we are developing and negotiating certain equipment enhancements that we expect will provide for nominal capacity of 383 kt/year of billets and 450 kt/year of laminates.

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

The following table sets forth the production output of our Volta Redonda long steel mill:

	2019	2020	2021
		<i>(in thousands of tons)</i>	
Billets (crude steel)	229	223	228
Long steel (finished products)	224	216	236

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 “—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 Brazil and Austria.

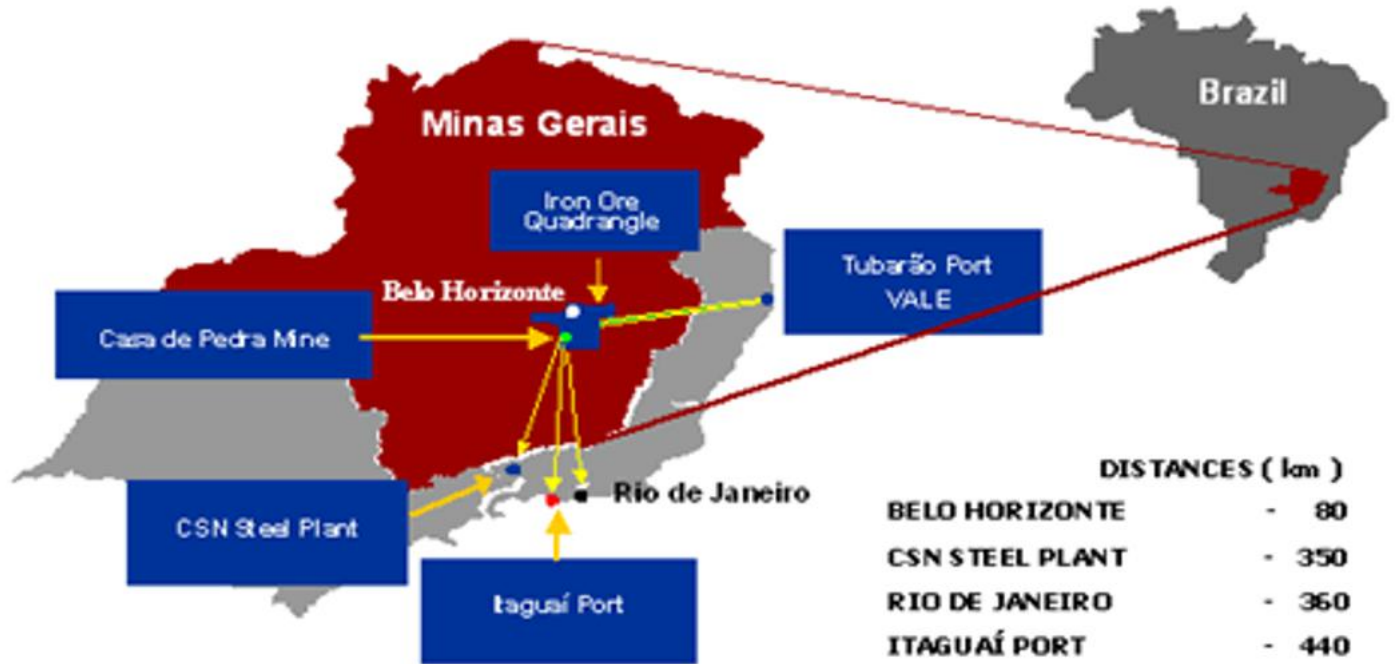
Casa de Pedra Mine

Casa de Pedra is an open pit mine located in the city of Congonhas, in the state of Minas Gerais, approximately 80 km south of the city of Belo Horizonte and 360 km north of the city of Rio de Janeiro. The site is approximately 1,000 meters above sea level and accessible from the cities of Belo Horizonte or Congonhas through mostly paved roads.

Casa de Pedra mine is a hematite-rich iron deposit of an early proterozoic banded iron formation in Brazil's “Iron Ore Quadrangle”, which is located in the central part of the state of Minas Gerais in the Southeast 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.

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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

Engenho mine, which began operations in 1950, is an open cast mine located in the Southeast region of the “Iron Ore Quadrangle”, 60 km from the city of Belo Horizonte, in the state of Minas Gerais. Its ore is processed in the Pires processing plant and in our unit at Casa de Pedra.

Our mining operations at Casa de Pedra and Engenho mines use hydraulic scoops and wheeled loaders to extract iron ore that is then transported by a large fleet of trucks with an installed annual run of mine capacity of approximately 120 million tons. The iron ore is then processed in our treatment stations, which have an installed capacity of 33 million tons of production per year (covering production in the central plant and production in the dry plants). We use electricity from 100% renewable sources, specifically hydroelectric sources.

Fernandinho Mine

Fernandinho mine is located in the city of Itabirito, in the Mideastern region of the state of Minas Gerais, 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 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 is accessible 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. We also maintain a fuel truck, a water truck and additional heavy equipment.

Our Bocaina 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 36 years.

Mineral Resources

The mineral resources of Bocaina quarry were estimated at the end of 2013 and subsequently revised and audited in 2020 by a qualified person following the standards set forth by the U.S. Securities and Exchange Commission’s Modernized Property Disclosure Requirements for Mining Registrants, as described in Subpart 229.1300 of Regulation S-K (*Disclosure by Registrants Engaged in Mining Operations*), or S-K 1300.

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CSN Cimentos engaged Minerals and Strategy Ltda. to prepare an independent Technical Report Summary on the Mina Bocaina Operation in the municipality of Arcos (Arcos Operations), state of Minas Gerais. The purpose of this Technical Report Summary is to support the disclosure of mineral resource and mineral reserve estimates for the Arcos Operations as of December 31, 2020.

This Technical Report Summary conforms to S-K 1300 and Item 601(b)(96) Technical Report Summary. go.to6 visited the property from August 23 to August 24, 2021.

The independent Technical Report also aims to establish improvements and possible adjustments in mining activities with the help of external professionals in geology and mining of carbonate rocks and contribute to the development of the Arcos unit. The report follows the international standard of S-K 1300 and summarizes the history of mineral exploration from the beginning in 1959 through 2020, mineral resources and reserves, mine design, infrastructure, capital and operation costs, and market analysis and technical-economic feasibility study. The report also aims to guide the organization of the technical collection existing in the company, highlighting them necessary, as well as their validity.

The qualified professionals who prepared this technical report understand that there are no risks related to mining, processing or environmental licensing that may materially affect the estimation of reserves.

The main topics of the Technical Report Summary are presented here and the mineral reserves were updated with the consumption from December 31, 2020 to December 31, 2021.

The table below shows a summary of mineral resources of Bocaina quarry as of December 31, 2021. There are no additional activities carried out from December 31, 2020 up to the date of the Technical Report Summary that modified the numbers of mineral resources.

	Quantity (Mt)	CaO (%)	MgO (%)	SiO2(%)	Al2O3(%)	Fe2O3(%)	LOI (%)	FSC
Measured								
Dolomitic Flux	10.98	35.98	16.03	1.31	0.13	0.15	44.99	
Calcitic Flux	30.35	53.63	0.95	1.42	0.29	0.14	42.56	
Limestone for clinker	65.43	49.15	2.54	5.47	0.75	0.47	40.74	297
Indicated								
Dolomitic Flux	4.21	39.33	14.01	1.07	0.15	0.15	44.76	
Calcitic Flux	20.76	53.39	0.99	1.65	0.29	0.16	42.54	
Limestone for clinker	45.01	49.35	2.03	6.15	0.82	0.55	40.22	266
Measured + Indicated								
Dolomitic Flux	15.19	36.90	15.47	1.24	0.13	0.15	44.93	
Calcitic Flux	51.11	53.54	0.96	1.51	0.29	0.15	42.55	
Limestone for clinker	110.44	49.23	2.33	5.75	0.78	0.50	40.53	284
Inferred								
Dolomitic Flux	2.53	44.86	8.64	0.66	0.19	0.12	44.17	
Calcitic Flux	14.97	53.27	1.05	1.77	0.27	0.17	42.59	
Limestone for clinker	58.57	45.65	2.50	11.61	1.28	0.96	37.37	132

Note: Mineral resources do not include mineral reserves.

Mineral Reserves

The mineral reserves estimated for the Bocaina quarry were developed in accordance with the SEC's standards. This section provides a summary of the procedures and methods applied to drive the mineral reserves. The work has been undertaken under the supervision of a qualified person, as defined in the SEC's guidelines.

To convert mineral resources into mineral reserves, the raw material needs for cement manufacturing were considered, with a focus on chemical quality and quantity required for the cement plant, as well as the needs of limestone and dolomite for the steelmaking plant. As all lithologies are usable for the manufacture of cement, the mining project was designed to maximize the recovery of lithologies, without interfering with environmental preservation areas or processing infrastructure areas and keeping strictly within the limits of properties (mineral rights and lands), all belong to CSN Cimentos. With these parameters in mind, a feasible pit project was created based on geotechnical assumptions, a production schedule and a financial model.

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The waste material is composed by Marl with CaO content below 32.7% at the bottom of the quarry, and it is not necessary to be removed. As a result, it does not affect the economic viability of the mineral reserves.

The estimates described herein are consistent with the quality of information available at the time of preparation of the Technical Report Summary, data supplied by outside sources and the assumptions applied.

The basis of the mine planning work was a Mineral Resource Model estimated in accordance with S-K 1300.

The following table sets forth a detailed breakdown of the mineral reserves as of December 31, 2021. The reserves classification reflects the level of accuracy of the modifying factors of the reserve.

Mineral Reserve Category	Tonnage (Mt)	CaO (%)	MgO (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	LOI (%)	FSC
Proved								
Dolomitic Flux	18.61	35.53	16.65	1.11	0.14	0.16	45.08	
Calcitic Flux	57.71	53.37	0.90	1.70	0.32	0.17	42.64	
Limestone for clinker	142.66	47.84	2.51	7.16	1.07	0.60	39.81	220
Probable								
Dolomitic Flux	11.85	41.56	11.14	0.58	0.18	0.12	44.76	
Calcitic Flux	6.42	53.07	0.92	1.44	0.27	0.13	42.96	
Limestone for clinker	50.57	44.79	4.15	9.52	1.01	0.74	38.66	158
TOTAL								
Dolomitic Flux	30.46	37.80	14.58	0.91	0.16	0.14	44.96	
Calcitic Flux	64.13	53.34	0.90	1.68	0.31	0.17	42.67	
Limestone for clinker	193.23	47.06	2.93	7.76	1.06	0.64	39.51	201
Waste (CaO <33.1%)	64.99							

Notes: Mineral reserves are based on measured and indicated mineral resources only.

Mineral reserves are estimated with the CaO cut-off content of 32.7%, for the total to reach the product targets.
Figures shown as totals may not represent an arithmetic sum of the figures that precede them due to rounding.

The mining inventory mentioned is based on measured and indicated resources only.

To estimate the mineral reserves, several activities were completed, including detailed open pit and waste dump designing, mine scheduling, fleet and workforce calculations, along with other key aspects of the mineral reserve, such as mineral processing, infrastructure, ESG, risk analysis, cost estimates, economic evaluation and sensitivity analysis. All studies were developed at a level of accuracy in line with a mineral reserves estimation.

The baseline for the mineral reserves considered the process to feed our current cement plant and to supply our steelmaking plant also.

The Bocaina quarry is based on open pit mining concept that uses conventional drilling, blasting, loading, and hauling techniques for all mining areas and rock types. The rocks are drilled with a 3" or 4" hydraulic drill and exploited using ANFO or explosives like emulsion. Loading is done by wheel loaders and hauling with trucks of 34 tons of capacity or off-road trucks with a capacity of 60 tons. Both feed the crushing system.

The crushing system is composed by comminution processes and granulometric classification. There are two crushing lines, one to the flux production, and the second to the clinker production. For clinker manufacturing, there is the goal of lime saturation factor (LSF) between 205 and 235, the MgO content between 2.2 and 2.8, and the granulometry less than 100 mm.

The materials are mined in 15 meter high benches which are considered an appropriate balance between productivity and selectivity.

Grade controls are performed via drilling, sampling, and assaying of the ore material within the pit boundaries.

The Bocaina quarry is in the city of Arcos, in the state of Minas Gerais. And, since the early 1970s, calcitic flux (limestone) and dolomitic flux (dolomitic limestone) have been supplied to Presidente Vargas Steelworks. These products are used in the process of sintering and calcination to produce steel.

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After the installation of the Arcos cement plant, the same quarry also supplied 100% of the limestone to the production of the clinker and cement. CSN Cimentos' cement production takes place in the Arcos and Volta Redonda Units. All clinkers used in the process are produced at the plant in Arcos, which has an installed capacity of 2.8 million tons per year. The clinker is transported from Arcos to Volta Redonda by railway.

All the ore mined at the Bocaina quarry is to supply the industrial plants to produce clinker, cement and steel, and there are no direct sales of the ore. For the purpose of economic analysis of the mine, a net tax revenue was estimated based on the product prices set forth in the following table:

Product	Unit	2021
Dolomitic fluxes	US\$/t	4.81
Calcitic fluxes	US\$/t	4.81
Limestone for clinker manufacturing	US\$/t	2.89

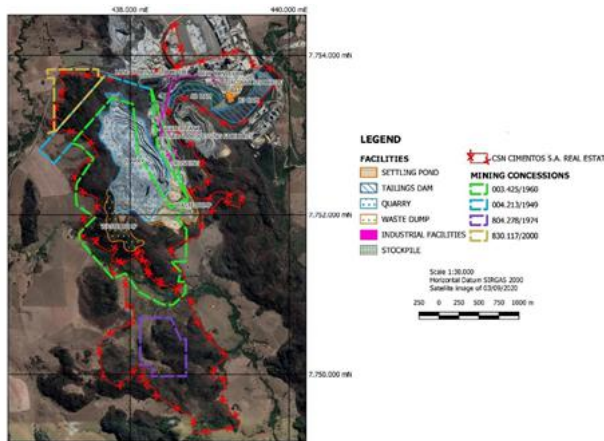
To estimate the mineral reserves, the qualified persons considered the use of 40% of limestone to produce calcitic flux, the use of 70% of dolomite and 30% of dolomite limestone to produce dolomite flux to achieve the specification of these products. The rest of mineral reserves is limestone for clinker production.

The proportion of limestone among the products was adopted by CSN Cimentos, and dolomitic limestone among the products was calculated with the average of MgO content of dolomite and dolomite limestone for dolomite flux.

The CaO cut-off content of 32.7% is also considered the LSF target of at least 200 for the sum of the proven and probable reserves of limestone for clinker.

Historically, roughly 30% of the total dolomite has clay contamination, and is not possible to be recovered to the steelmaking, but it is useful for clinker production.

The pit boundaries were limited by a number of physical constraints such as mining rights, environmental licenses, land properties and infrastructure, as illustrated in the following figure:



[Physical Constraints](#)

The mining plan for proven reserves foresees the extraction of 7,500,000 tons of ores per year by 2071, considering the production of 2,418,742 tons of ore to produce calcitic flux, 1,247,638 tons of ores to produce dolomitic flux and 3,833,621 tons of ore for clinker production. The mining exploitation is divided into four steps.

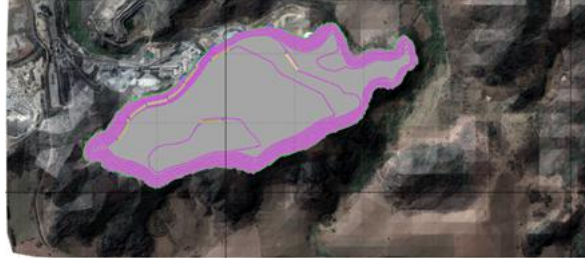
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A plan view of the ultimate pit design and its corresponding tonnage evaluation are shown below. The waste material composed by Marl with CaO content below 32.7% is at the bottom of the quarry, and it is not affecting the ores exploitation.

Following is the final pit design evaluation:

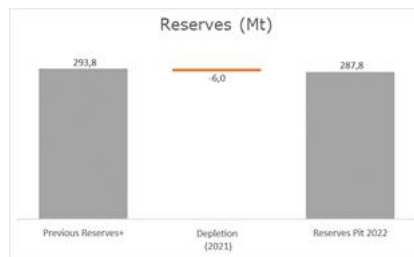
Item	Unit	Value
Dolomitic Flux	Mt	31.56
Calceitic Flux	Mt	65.36
Limestone for clinker	Mt	196.89

Following is a plan view of the final pit design:



CSN Bocaina quarry reserves were 293.8 million tons at the end of 2020, and considering the material mined in 2021 the reserves would be 287.82 million tons at the end of 2021.

Following is an estimated waterfall graph indicating the mineral reserve changes from 2021 to 2022:



Tin Facility

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

[Table of Contents](#)*Mineral Rights and Ownership*

We hold concessions to mine iron ore, limestone and dolomite. We purchase manganese in the local market. As of the date of this annual report, we own 78.2% 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 take place in three different sites: Casa de Pedra mine and Pires beneficiation plant (both of which belong to CSN Mineração) and Fernandinho mine (which belongs to Minérios Nacional).

Casa de Pedra

Our mining rights for Casa de Pedra include the mine, a beneficiation plant, roads, a loading yard and a railway branch and are duly registered with the ANM. The 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 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 Resources

The Mineral Resource estimate performed by CSN is summarized in Table 2 as at 1st November, 2017. In 2021, it was performed an independent check on the reported CSN Mineral Resources using CSN-provided data. The Mineral Resource statement was successfully calculated within 5% of stated quantity and quality.

Mineral Resource as at 1st November, 2017

Resource Classification	Tonnage	Fe	SiO₂
#	Mt	%	%
Measured	1,123	41.97	36.63
Indicated	3,145	39.70	38.67
M+I	4,268	40.30	38.13
Inferred	1,734	37.56	39.82

Reasonable prospect of eventual economic extraction was verified by performing a pit optimization.

Mineral Reserves

The 2022 Mineral Reserves estimate for the Casa de Pedra mine was developed in accordance with the SEC standards. This section provides a summary of the procedures and methods applied to derive the Mineral Reserves. The work has been undertaken under the supervision of a Qualified Person as defined in the SEC guidelines.

To convert Mineral Resources to Mineral Reserves, consideration was given to forecasts and estimates of product price, metallurgical recovery, mining dilution and ore loss factors, royalties and costs associated to mining, processing, overhead, and logistics. These parameters were used to derive economic cut-off grades and create a feasible pit design based on geotechnical assumptions, a production schedule and a financial model.

The estimates described herein are consistent with the quality of information available at the time of preparation, data supplied by outside sources, and the assumptions used.

The basis of the mine planning work was a Mineral Resource model estimated in compliance with the CRISCO standards. The Mineral Resources were internally developed by CSN and further audited by an external company in 2021. No critical issues were reported.

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The detailed breakdown of the Mineral Reserve is presented in the following table. The Reserve classification reflects the level of accuracy of the modifying factors of the Reserve.

Table 1 - Mineral Reserve as at 31st December, 2021

Mineral Reserve Category	Tonnage (Mt)	Fe (%)
Proved	152.9	42.49
Probable	1,925.5	41.07
Total	2,078.4	41.17

Notes: - Tonnages are reported in wet basis.

- Mineral Reserves are based on Measured and Indicated Mineral Resources only.
- The Mineral Reserve is included in the Mineral Resource

The mining inventory aforementioned is based on Measured and Indicated resources only. The estimate includes dilution and ore loss factors. Stockpiles within the current pit limits were considered waste as they are not classified as Mineral Resource.

To estimate the Mineral Reserves a number of activities were completed including detailed design of pit and waste dumps, mine scheduling, fleet and workforce calculations, along with other key aspects of the Mineral Reserve such as mineral processing, infrastructure, ESG, risk analysis, cost estimates, economic evaluation and sensitivity analysis. All studies were developed at a level of accuracy in line with a Mineral Reserve estimate.

The Base Case for the Mineral Reserves considered the process of ore at the current processing plant at Casa de Pedra along with the greenfield project of P15 which is being developed and licensed.

The Casa de Pedra mine is based on a mining concept that uses conventional drill, blast, load and haul techniques for all mining areas and rock types. 100% of rock will be blasted and loaded with excavators and loaders into off-road trucks, and hauled to final destinations, i.e., primary crusher, stockpiles or waste dumps. Specifically, primary mining will be undertaken by large hydraulic excavators (26-m³ bucket capacity) coupled with 240st off-road trucks. Front-end loaders of 25-m³ bucket capacity will also operate at the pit and stockpiles.

The materials will be mined in 13-m high benches which are considered an appropriate balance between productivity and selectivity.

Grade control will be performed via drilling, sampling and assaying potential ore material within the pit boundaries.

The mine will operate 365 days, 24 hours in 3 shifts. The base case for the Project is an owner's operation.

The long range prices assumed for mine planning purpose correspond to year 2025. The product pricing forecast is shown in the table below.

Table 2 – Product Price Forecast

Platts Iron Ore Index	Unit	Forecast by Year				Long Term Forecast
		2021	2022	2023	2024	2025
Platts 62	US\$/dmt	102.2	87.7	81.1	78.0	74.0
Platts 65	US\$/dmt	122.6	105.2	97.3	93.6	88.8
Platts 58	US\$/dmt	71.5	61.4	56.8	54.6	51.8

Various testworks have been performed in a pilot facility to derive the mass yield function, i.e. Mass Recovery = 1.1786 * Fe%. Hematite, friable itabirites, compact itabirites and canga were considered amenable for processing.

The economic mine cut-off to decide whether a block should be mined or left in-situ was calculated by the NPVS software of Datamine.

The pit boundaries were limited by a number of physical constraints such as mining rights, environmental licenses, land properties and infrastructure as illustrated in the figure below.

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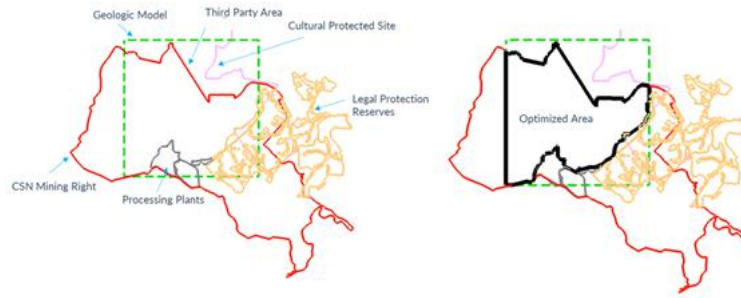


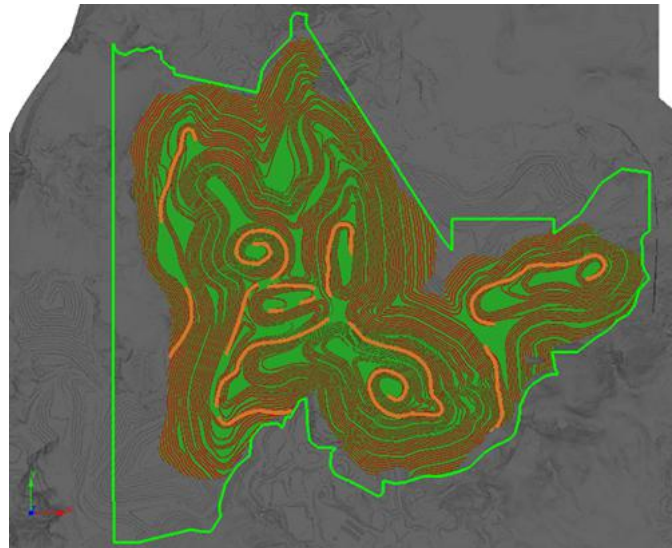
Figure 1 – Physical Constraints

Planned dilution and ore loss factors were incorporated to the block model through a regularization procedure. The model contains regularized blocks sized 25 m (X) by 25 m (Y) by 13 m (Z) which reflects the selectivity mining unit (SMU) dimensions. Additionally, a uniform 5% unplanned dilution factor and 95% mining recovery were applied to the pit optimization.

A plan view of the Reserve pit design and its corresponding tonnage evaluation are shown below.

Table 3 – Pit Design Evaluation

Item	Unit	Value
Ore	Mt	2,078
Waste	Mt	1,091
Total Rock	Mt	3,170
Strip Ratio	t/t	0.52



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Figure 2 – Plan View of the Pit Design

The Casa de Pedra Reserves reached 2.80 Bt in 2020. Considering the material mined out in 2021 (depletion) the total Reserves amounted to 2.77 Bt. In 2022, the Mineral Reserve was updated at 2.1 Bt in accordance to SEC rules. The variation is due to a number of factors, illustrated in the graph below, including:

- In the 2022 estimation the pit boundaries were more constrained. Specifically, CSN excluded the ore within adjacent areas to the northeast of the mine because of the proximity to mineral rights owned by third parties which would require the sign off of formal agreements for a joint operation.
- Review of the pit design accordingly to the updated technical and economic parameters.

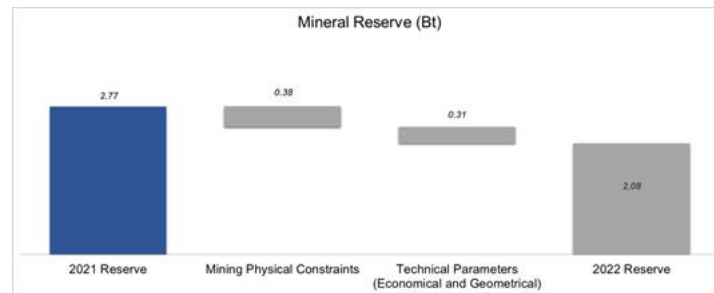


Figure 3 – Waterfall graph indicating the Mineral Reserve changes from 2021 to 2022

Internal Protocols
RESOURCES

CSN is committed to ensure the application of Mineral Resource's best practices. The involvement of CSN professionals with institutions, organizations and universities in Brazil and overseas, beyond the constantly update of its internal protocols, is well documented and applied. Some internal protocols relate to:

- Updated operational procedures for routine activities, including:
 - Geological mapping,
 - Coordinate checks on drillhole collars,
 - Downhole survey protocols,
 - Coreshed activities,
 - Database management system containing collar, survey, and assay files
- Drilling with appropriate and satisfactory methods for geological logging, structural measurements, and metallurgical testing's by use of diamond drill core
- Logging is performed onsite using CSN geologists
- Sampling is performed on all drill core and is supervised or directly performed by CSN geologists
- In terms of QA/QC practices, CSN staff regularly inspects analytical and sample preparation laboratories. CSN staff also includes the use of 05 (five) certified reference material (CRM), blanks and laboratories duplicates all inserted at appropriate frequencies to the primary and secondary laboratories
- Specific gravity determinations are checked by water immersion method, and by pycnometer or "sand bottle" method
- Geological model is interpreted using domains classified into a series of lithology codes based on a combination of grain particles (lump and fines) and chemical thresholds used directly by mine planning and beneficiation departments.

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RESERVES

For the estimation of mineral reserves in the iron ore business, CSN seeks best practices with consulting firms and universities with a distinguished professional and academic track record. Attempting to apply the most appropriate techniques, the reserve calculation aims to verify factors that may affect the estimates and that can be constantly updated and refined, such as:

- Structural Factors
 - Input parameters of mineral resources
 - Pit designs and pushbacks

 - Geotechnical models
 - Hydrogeological factors
 - Land surface properties
 - Mineral Rights Licenses
 - Environmental Licenses
 - Water usage rights
 - Regulatory licenses and authorizations to operate
 - Physical constraints such as:
 - Geological model boundaries
 - Third party areas
 - Cultural protected sites
 - Protected Reserves
 - Processing Plants and facilities

- Mine Operation
 - Mining recovery assumptions
 - Production Rate assumptions

 - Load and Haul fleet adopted
 - Dilution and mining recovery assumptions

- Plant Operation
 - Mass recovery that directly affects the volume produced of concentrates with their respective qualities
 - Mineral processes changes and plant modifications that impact plant performance and product quality

 - Potential upgrades on mineral characterization that could modify the performance of processing plants

- Others
 - Prices by products and over the years
 - Royalties and costs associated to mining, processing, overhead, and logistics

 - Taxes and exchange rate

Our reserves and resources information are estimates based on currently available information, and may not represent actual production volumes in the future. We can provide no assurance that our estimates will not change or that we will be able to extract and convert all of our reserves and resources into production volumes. For more information, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—Our mineral reserves 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.”

[Table of Contents](#)*CSN Projects: Sergipe, Pará, Ceará and Paraná Operations*Mineral Resources

The mineral resources of CSN Projects were estimated, revised and audited in 2021 by a qualified person following the standards of S-K 1300.

CSN Cimentos engaged go.to6 to prepare an independent Technical Report Summary on the Sergipe Project, municipality of Maruim, state of Sergipe; Pará Project, municipality of São João de Pirabas, state of Pará; Ceará Project, municipality of Jaguaruana, state of Ceará; and Paraná Project, municipality of Cerro Azul, state of Paraná. The purpose of this Technical Report Summary is to support the disclosure of Mineral Resource and Mineral Reserve estimates as of December 31, 2021.

The Technical Report Summary conforms to S-K 1300 and Item 601(b)(96) Technical Report Summary.

The independent Technical Report also aims to establish improvements and possible adjustments in geological activities with help of external professionals in geology and mining of carbonate rocks and contribute to the development of our greenfield projects. The report follows the international standard of S-K 1300 and summarizes the history of mineral exploration from 2017 through 2021, mineral resources and reserves.

The Technical Report Summary also aims to guide the organization of the technical collection existing in the company, highlighting them necessary, as well as their validity.

The qualified professional who prepared this technical report understands that there are no risks related to geology, mining, processing, environmental licensing that may materially affect the estimation of mineral resources and reserves.

The main topics of the Technical Report Summary presented here were updated to December 31, 2021.

The following table sets forth a summary of mining rights and mineral resources and reserves as of December 31, 2021:

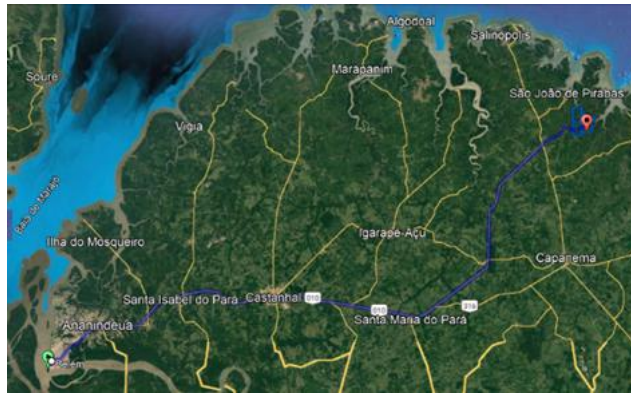
Project	Mining Rights	Resources			Reserves		Total (Mt)
		Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Proven (Mt)	Probable (Mt)	
	Total	270	278	368	0	235	235
Sergipe	878.010/2017	0	21	207	0	74	74
	878.039/2018	270	257	161	0	162	162
	Total	70	357	417	0	283	283
Pará	851.354/2017	46	137	7	0	111	111
	851.355/2017	18	58	25	0	88	88
	851.358/2017	2	74	216	0	45	45
	851.359/2017	4	87	168	0	40	40
	Total	454	502	903	0	167	167
Ceará	800.108/2014	180	7	0	0	40	40
	800.096/2014	37	6	0	0	51	51
	800.097/2014	49	69	212	0	0	0
	800.018/2015	13	38	34	0	0	0
	800.020/2015	4	0	0	0	0	0
	800.176/2011	20	74	199	0	0	0
	800.177/2011	0	57	198	0	0	0
	800.179/2011	0	28	173	0	0	0
	800.181/2011	107	149	22	0	77	77
	800.507/2013	22	10	0	0	0	0
	800.111/2014	22	64	66	0	0	0
	Total	4	204	68	0	356	356
	Paraná	820.563/1980	0	31	0	0	34
820.564/1980		0	155	0	0	158	158
826.388/2007		4	18	68	0	164	164

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The greenfield projects listed above are in four different states in Brazil, close to the regions of great demand of the civil construction materials market, with a strategic positioning for our growth. The following map sets forth the location of these greenfield projects:



The following map sets forth the location of the Pará Project in São João de Pirabas, and the access by road departing from the city of Belém, capital of the state of Pará:

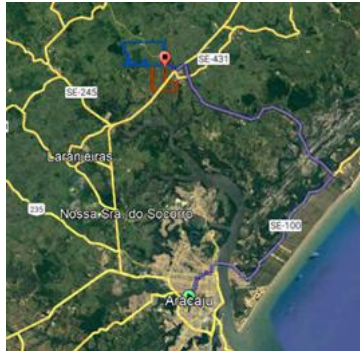


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The following map sets forth the location of the Ceará Project in Jaguaruana, and the access by road departing from the city of Fortaleza, capital of the state of Ceará:

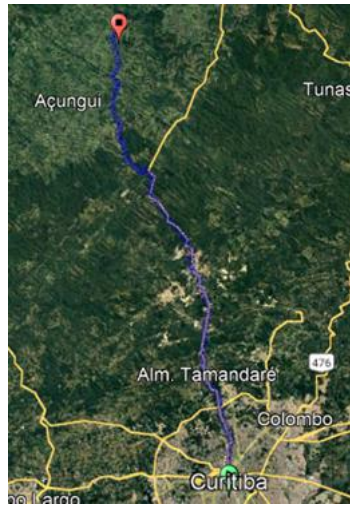


The following map sets forth the location of the Sergipe Project, in Maruim, and the access by road departing from the city of Aracaju, capital of the state of Sergipe:



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The following map sets forth the location of the Paraná Project, in Cerro Azul, and access by road, departing from the city of Curitiba, capital of the state of Paraná:



Mineral Reserves

The mineral reserves estimated for CSN Cimentos’ greenfield projects were developed in accordance with the SEC standards. This section provides a summary of the procedures and methods applied to drive the mineral reserves. The work has been undertaken under the supervision of a Qualified Person as defined in the SEC guidelines.

To convert mineral resources into mineral reserves, the raw material needs of the cement manufacturing were considered, focusing on the chemical quality and quantity needed to supply a future factory at each location, creating a feasible pit project based on geotechnical assumptions, within the limits of the mining rights of the projects. The estimation described herein is consistent with the quality of information available at the time of Technical Summary Report, data supplied by outside sources and the assumptions applied.

Each site is at different stage of development and has different levels of information (Ceará Project, Sergipe Project, Pará Project and Paraná Project).

The basis of the mine planning work was a Mineral Resource Model estimated in accordance with the SEC S-K 1300 standards.

The following table sets forth a detailed breakdown of the mineral reserve of each site as of December 31, 2021. The reserves classification reflects the level of accuracy of the modifying factors of the reserve.

Mineral Reserve Category (Limestone for clinker)	SERGIPE	PARÁ	CEARÁ	PARANÁ
	Tonnage (Mt)	Tonnage (Mt)	Tonnage (Mt)	Tonnage (Mt)
Proved	0	0	0	0
Probable	235.50	283.30	167.25	356.49
Total	235.50	283.30	167.25	356.49

Notes: Mineral reserves are based on measured and indicated mineral resources only.
Mineral reserves are not included in the mineral resource.

The mining inventory is based on measured and indicated resources only.

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For all greenfield projects, reserves can only be defined as proven reserves when all modifying factors were considered, such as:

- obtaining the mining concession title from the ANM;
- acquisition of properties, land pursuant to mining easements or agreement with surface owners;
- carrying out additional technical studies to identify possible mining limiting factors (such as drainages, natural caves, geotechnical aspects, vegetation, hydrogeology and technical constraints not yet studied, etc.); and
- environmental permits to be granted.

Each project has a certain number of mining rights that make up the project as a whole.

*Production*Casa de Pedra Plant

Casa de Pedra facilities are located in the city of Congonhas, in the state of Minas Gerais. 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 run of mine capacity of approximately 120 million tons and 40 million tons, respectively.

[Table of Contents](#)Pires and Fernandinho Beneficiation Plants

Pires plants are dry beneficiation plants that receive material from Engenho mine and Casa de Pedra mine and generate final products, such as lump ore and sinter feed.

Fernandinho plant receives material from the Fernandinho mine, located in the city of Itabirito, state of Minas Gerais, and generates sinter feed and fines as final products.

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

	Production ⁽¹⁾		
	2019	2020	2021
Casa de Pedra ⁽²⁾ (Mt)	21.87	16.36	18.11
Grade ⁽³⁾ (%)	62.5%	61.9%	61.6%
Pires ⁽²⁾ (Mt)	10.22	5.36	9.20
Grade (%)	60.8%	56.9%	57.4%
Fernandinho ⁽²⁾ (Mt)	0.61	0.68	0.87
Grade (%)	64.7%	64.9%	64.4%

(1) In addition to its own production, CSN Mineração also purchased iron ore from third parties. Third party purchase volumes were 6.2 million tons, 8.6 million tons and 8.8 million tons in 2019, 2020 and 2021, respectively.

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

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

The following table sets forth our consolidated sales in the periods presented:

	2019	2020	2021
Consolidated sales (Mt)	34.89	26.94	28.32

Expanding our Mining Capacity

We believe that the next few years will be transformational for our mining subsidiary CSN Mineração, as we have projects at an advanced stage of development with a robust investment plan to finance and accelerate iron ore production. CSN Mineração's current business plan contemplates an expansion in annual production capacity from 33 million tons in 2021 to 108 million tons per year in 2033, assuming it is able to complete all of its planned expansion projects (not including ore purchases from third parties, but only proprietary production).

CSN Mineração has four projects under development that will be carried out gradually until 2033:

- (i) Central Plant Expansion Projects (*Fine Tailings Central Plant and Expansion of Central Plant*): licensed brownfield expansions to accelerate the production of pellet feed at low operating costs; increase by 6.5 million tons per year, with an estimated investment of R\$1.2 billion through 2023.
- (ii) Dams Tailings Recovery Projects (*Pires and Casa de Pedra Tailings Processing Plants*): licensed brownfield expansions to generate value by recovering 180 million tons of tailings stored in dams as part of our dam de-characterization program; increase of 8.0 million tons per year, with an estimated investment of R\$1.1 billion through 2025.
- (iii) Itabirito Projects (*Itabirito P15, Plant P4, Itabirito P28 Mascate, Conversion of the Central Plant and Itabirito P28 Esmeril*): mix of brownfield expansions (P15, already with an implementation license issued, quotes of equipment in progress and start of implementation scheduled for 2021) and greenfield projects, all with known technology and competitive investment per ton for the production of premium pellet feed with low impurities and high iron content (including direct reduction pellet feed); increase of 103 million tons per year, with an estimated investment of R\$22.7 billion by 2032.
- (iv) TECAR Expansion Projects: brownfield investments (the 60 million tons per year phase has already been licensed) to support mining expansions in already existing areas; capacity increase in three phases (60, 84 and 130 million tons per year), with an estimated investment of R\$6.3 billion through 2028.

Iron Ore Production Capacity

CSN Mineração's recent track record includes implementation of projects with an accelerated timetable and high returns, all "on-time, on-budget and on-quality," which shows its expertise in the development and implementation of capital projects. An example of this are (i) transformation of the tailings generated from its

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central plant production process into a high-quality product (66% of average iron content) by means of CMAI I and II magnetic concentrators (representing a total investment of R\$134 million in 2017 and 2018), (ii) central plant expansion project under execution, which includes the projects of CMAI III, recrushing and spirals (expected to be concluded in May 2021, with estimated investments of R\$317 million), and (iii) pioneering initiative to implement tailings filtering plants, the largest in the world, with stages completed in August 2018 and June 2019, representing a total investment of R\$250 million and total filtering capacity of nine million tons per year, therefore enabling operations that are 100% independent of tailings dams.

CSN Mineração’s focus on project execution is based on three pillars (i) sustainability: 100% of its projects are independent of tailings dams, (ii) low execution risk: all projects use technologies already consolidated in the market and dominated by us, and (iii) return: low investment per ton for the production of premium products at competitive costs (maintaining current levels of operating expenses).

Dams

As a pioneer in the use of technologies that result in the possibility of stacking the tailings generated in the ore production process, CSN Mineração’s production is 100% independent of tailings dams. After significant investments in recent years to increase reliability, disposal and dry stacking, 100% of CSN Mineração’s tailings go through a dry filtering process and are stacked in dedicated areas. This initiative led to expertise in this technology, enabling current production and sustainable growth without the use of tailings dams.

In addition to our focus on the quality of our products and competitive costs, the environmental impact of our operations is one of our priorities. We are a pioneer in Brazil in our commitment to eliminate the use of tailings dams from our operations. The full implementation of CSN Mineração’s tailings filtering plant allowed it to achieve this independence in January 2020, filtering and dry stacking 100% of the tailings generated from its production process, as set forth in the following chart:



Source: Company.

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

Name of the Dam/Dike	Company / Entrepreneur	Main Use	Substance	Height (m)	Capacity (m³)	Construction Method	Last Certification	Risk	Impact	Status
Casa de Pedra ⁽¹⁾	CSN Mineração	Containment of mining tailings	iron ore	84.00	65,374,575	Downstream	Sep/21	Low	High	Active
B4	CSN Mineração	Containment of mining tailings	iron ore	65.00	13,001,821	Upstream	Sep/21	Low	High	Inactive
B5	Decharacterized and unregistered.									
Dique Batateiro de Low	Decharacterized and unregistered.									
Pilha da Vila II dike	CSN Mineração	Containment of mining tailings	Gravel	28.00	18,556	Single stage	Sep/21	Low	Low	Active
Bichento IIIA dike	CSN Mineração	Containment of mining tailings	Gravel	18.00	116,696	Single stage	Sep/21	Low	Low	Active

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Esmeril IV dike	CSN Mineração	Containment of mining tailings	Gravel	39.50	282,079	Single stage	Sep/21	Low	High	Active
Lagarto dam	CSN Mineração	Containment of mining tailings	Gravel	14.00	210,000	Single stage	Sep/21	Low	High	Active
Poco Fundo dam	Decharacterized and unregistered.									
Vigia auxiliary dam	CSN Mineração	Containment of mining tailings	Iron ore	25.00	2,837,223	Upstream	Sep/21	Low	High	Under de-characterization
B2 dam	Minérios Nacional	Containment of mining tailings	Iron ore	40.00	2,616,466	Upstream	Sep/21	Low	High	Inactive
B2 auxiliary dam ⁽²⁾	Minérios Nacional	Containment of mining tailings	Iron ore	33.00	6,439,465	Upstream	Sep/21	Low	High	Inactive
Engenho dike	CSN Mineração	Containment of mining tailings	Gravel	12.40	8,821	Single stage	Sep/21	Low	Medium	Active
Vigia dam	CSN Mineração	Containment of mining tailings	Iron ore	28.00	812,901	Upstream	Sep/21	Low	High	Under de-characterization
Ecológica 1 dam	Minérios Nacional	Containment of mining tailings	Gravel	18.50	41,000	Rusante	Sep/21	Low	High	Active
Ecológica 2 dam	Decharacterized and unregistered.									
B1 - Agua Preta	Decharacterized and unregistered.									
B2 - Agua Preta	Decharacterized and unregistered.									
B2 dam	CSN	Water storage and catchment	Dolomite	11.00	398,200	Center line	Sep/21	Low	Low	Inactive
B3 dam	CSN	Containment of limestone	Limestone	11.00	1,065,560	Single stage	Sep/21	Low	High	Inactive
PIT-01	ERSA	Containment of mining tailings	Deposit of tin	14.30	6,917,403	Natural dam / single stage	Sep/21	Low	High	Active
Taboquinha 01 - Crente	ERSA	Containment of mining tailings	Deposit of tin	18.00	2,941,251	Upstream	Sep/21	Low	Medium	Inactive
Taboquinha 02 - Serra Azul	ERSA	Containment of mining tailings	Deposit of tin	19.00	1,983,201	Upstream	Sep/21	Low	Medium	Inactive
Taboquinha 03	ERSA	Containment of mining tailings	Deposit of tin	16.00	1,708,100	Single stage	Sep/21	Medium	Medium	Inactive
Taboquinha 04	ERSA	Containment of mining tailings	Deposit of tin	16.00	2,253,100	Single stage	Sep/21	Medium	Medium	Inactive
Igarapava	Aliança Geração de Energia S.A.	Hydroelectric	Water	42.10	241,840,000	Soil - concrete face rockfill	Dec/20	Low	High	Active
Itá (dam)	Engie Brasil	Hydroelectric	Water	125.00	5,100,000,000	Concrete face rockfill	Aug/20	Low	High	Active
Itá (dike 1)	Engie Brasil	Hydroelectric	Water	22.00		Compressed soil, upstream protection with riprap rock and downstream protection with grass	Aug/20			
Itá (dike 2)	Engie Brasil	Hydroelectric	Water	22.00		Compressed soil, upstream protection with riprap rock and downstream protection with grass	Aug/20			
Itá (dike 3) ⁽³⁾	Engie Brasil	Hydroelectric	Water	29.00		Compressed soil, upstream protection with riprap rock and downstream protection with grass	Aug/20			

(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 2020, 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 Minas Gerais State Prosecutor's Office, as confirmed by an expert report issued by the analyst of the Minas Gerais State Prosecutor's Office.

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

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Since the accident in 2015 in the city of Mariana, in the state of Minas Gerais, involving the breaking of an upstream mining dam operated by another mining company, we changed our processes to reduce tailings deposits. In addition, following another accident involving the breaking of an upstream mining dam operated by another mining company in January 2019 in the city of Brumadinho, in the state of Minas Gerais, we have continued to execute our plan for the decommissioning or decharacterization of our six inactive tailings dams pursuant to a timeline that is, as of the date of this annual report, under development by our ESG and engineering teams.

Since 2020, we no longer dispose tailings in our dams, using dry stacking to stock this material. Casa de Pedra dam is used only for water recirculation and 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 comprises railway and port facilities.

*Railways**Southeastern Railway System*

MRS has a 30-year concession to operate, through 2026 and renewable for an additional period of 30 years, Brazil's Southeastern railway system. As of December 31, 2021, we held 37.27% (18.64% directly and 18.63% through CSN Mineração) of MRS's total capital. For more information, see "Item 5. Operating and Financial Review and Prospects—Off-Balance Sheet Arrangements—"Take-or-Pay" Contractual Obligations." 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 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.

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.

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In 1997, we were awarded a concession granting the exclusive right to operate cargo transportation at the railway that belonged to 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 that settled all claims of non-compliance by us with the original concession agreement until 2012, and multiple agreements, including an investment agreement (discussed below) and a new concession, pursuant to which we were granted the right to develop and operate new tracks and the Northeastern Railway System management was divided in two sub-railway systems:

- 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 – Altos, Altos – Fortaleza, Fortaleza – Souza, Souza – Recife/Jorge Lins, Recife/Jorge Lins – Salgueiro, Jorge Lins – Propriá, Paula Cavalcanti – Cabedelo and Itabaiana – Macau, with 4,238 km of railways, of which 1,191 km are operational, and we are negotiating with the National Agency for Ground Transportation (*Agência Nacional de Transportes Terrestres*), or ANTT, to return the remainder. As of December 31, 2021, we held 92.71% of the capital stock of FTL and its concession extends until 2027, renewable for an additional 30 years. As of December 31, 2021, R\$71.3 million in concession payments were outstanding over the remaining six years of the concession.
- 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 Eliseu Martins – Trindade, Trindade – Salgueiro, Salgueiro – Porto Suape, Salgueiro – Missão Velha 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, 2021, we held 47.26% of the capital stock of TLSA and its concession extends until the earlier of 2057 or the date when TLSA recovers its invested equity at an annual rate of return of 6.75%.

In September 2013, we entered into an investment agreement, or the TLSA Investment Agreement, with 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 and our partners in TLSA. 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\$13.2 billion is under review by the partners of TLSA and subject to revision of the TLSA Investment Agreement, which, as of the date of this annual report, has not been formalized.

The TLSA Investment Agreement also provides for indicative terms and conditions, including amounts, under which the Brazilian National Economic and Social Development Bank (*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 the Constitutional Financing Fund of the Northeast (*Fundo Constitucional de Financiamento do Nordeste*), or FNE, has already been received by TLSA.

In 2016, the Federal Court of Accounts (*Tribunal de Contas da União*), or TCU, 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.

Valec’s non-compliance with material obligations under the TLSA Investment Agreement has also contributed to a slow pace of construction of the new tracks and caused revision of the budget.

In the end of 2019, ANTT recommended the expiry of the concession contract for the Northeastern Railway System I, and, in first half of 2020, ANTT recommended the expiry of the concession contract for the Northeastern Railway System II. Both decisions were subject of requests to amend the decision by the concessionaires and, as of the date of this annual report, we await a final decision by ANTT.

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ANTT's decisions do not take immediate effect and will only take effect once they have been considered and decreed by the President of Brazil, as well as decided in all final instances. For more information, see "Item 8. Financial Information—8A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings—Northeastern Railway System Proceedings."

*Port Facilities*Solid Bulks Terminal

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

TECAR is connected to road and rail systems across Southeast Brazil and is one of the four port terminals that make up the Port of Itaguaí facilities. With a strategic location and a total area of 740,761 m², the terminal consists of a concrete molded berthing pier superposed on jacketed stilts connected to the mainland by an access bridge perpendicular to the berthing pier. Its backyard includes conveyor belts, an internal road system, bulk storage yards and a railway looping, as well as industrial and administrative facilities.

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, 2021, approximately R\$185 million of the cost of the concession was outstanding and payable over the remaining five 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 2019, this area represented 51% of the Brazilian GDP, according to 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 2019 and 2020, which increased the terminal's service level and productivity, including maritime access and berths achieving certification for 15.4 meters in draft, including tides, which is the deepest in the East coast of South America, as well as the acquisition of new equipment (nine rubber tyred gantry cranes). In 2021, we continued to invest in updating our operating facilities and complying with regulatory requirements. In addition, we paved 20,000 m² of yard area to permit for additional cargo storage.

In 2022, we will begin operating nine new rubber tyred gantry cranes and we expect to acquire five new forklifts, improving our operational capacity. TECON will keep investing in the project 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 per year. This expansion project, which is under discussion with regulatory agencies, includes a quay extension of 273 meters, with a total resulting length of 1,083 meters, acquisition of two new gantry cranes (ship-to-shore) for larger container carriers, acquisition of additional yard civil works and equipment, and dredging of the access channel and maneuvering basin.

In 2021, TECON moved 120,000 containers, 705,000 tons of steel products, 110,000 tons of general cargo and 1,472,000 tons of solid bulk, as compared to 154,000 containers, 457,000 tons of steel products, 122,000 tons of general cargo and 1,435,000 tons of solid bulk in 2020. The decrease in the container volume in 2021 is mainly due to the adverse effect on shipping lines of the economic crisis generated by the COVID-19 global pandemic, which mainly impacted Asian imports handled by TECON. In order to mitigate the effects of this decrease in container volume in 2021, TECON sought new markets and began operating sugar shipments, as well as new bulk, and increasing the volume of other cargo also handled in 2020, including solid bulk, limestone, ore pellets, gypsum, dolomite and large general cargo projects.

Our Cement Segment

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

[Table of Contents](#)*Production*

Our cement production in the Southeast region of Brazil takes place at Volta Redonda and Arcos and begins with the influx of raw materials comprising clinker, limestone, gypsum and slag. 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. 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 stored in a warehouse, arriving at our cement plant by road. We use natural gypsum, which arrives at the plant by truck and is stored in a warehouse. Our cement production in the Northeast region of Brazil takes place in Alhandra in a similar clinker production process as in Arcos. 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 our Volta Redonda, Arcos and Alhandra plants, resulting in an annual plant capacity of 2.3 million tons of cement in Volta Redonda, 2.4 million tons of cement in Arcos and 1.3 million tons of cement in Alhandra. The cement grinding process in Volta Redonda and Arcos is by vertical mills. The mills have a hydraulic roller system, which uses pressure to grind the layer of material on the turntable. In Volta Redonda, hot gas, derived from the combustion of natural gas or petroleum coke, is used in the mills to dry materials. In Alhandra, the cement grinding process is by ball mills. The materials are ground to a fine powder, in rotating, cylindrical ball mills containing a charge of steel grinding balls.

The types of cement we produce are: CP III 32, 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 seven chambers and 28,000 tons of total capacity. Our Alhandra plant has a silo with four chambers and 18,000 tons of total capacity. Cement can be shipped in bagged and bulk forms.

Our Energy Segment

Our energy segment comprises our generation plants, which support reduction of our production costs and exposure to fluctuations or availability of certain energy sources. Following is an overview of our energy segment related assets.

Thermoelectric Co-Generation Power Plant

We have a 235 MW thermoelectric co-generation power plant at the Presidente Vargas Steelworks. 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 have a turbine generator, which adds 22 MW to our 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. The total annual capacity of our thermoelectric co-generation power plant is 267 MW.

Itá Hydroelectric Facility

We and Engie Brasil 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 Brasil directly owns the remaining 39.5% of the Itá hydroelectric facility, which has an installed capacity of 1,450 MW.

Igarapava Hydroelectric Facility

We own 17.92% of a consortium that built and has the right to operate for 30 years, until September 2031, the Igarapava hydroelectric facility. Other consortium members are Aliança, L.D.R.S.P.E. Geracão 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 customers, focusing on their specific needs and providing tailor-made solutions.

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Our commercial area is responsible for sales of all our products. This area is divided into two major teams, one focused on sales in international markets and the other on sales in the domestic market. The domestic market sales team covers seven market divisions: packaging, distribution network, automotive industry (automakers and auto parts), home appliances, general industry, construction and pipes. We also have a team responsible for selling all process residues, which include blast furnace slag, pitch and ammonia, which are widely used as inputs in chemical and cement industries.

The distribution network division is responsible for supplying large steel processors and distributors. In addition to independent distributors, we count with our own distributor, Prada Distribuição. The pipes division supplies oil and gas pipe manufacturers as well as industries that produce small diameter pipe and light profiles. The packaging division acts in an integrated way with suppliers, representatives of the canning industry and distributors to respond to customer needs for finished products. We supply the automotive division from a specialized mill, CSN Porto Real, and also by a portion of the galvanized material produced at Presidente Vargas Steelworks, thereby benefitting from a combined sales strategy.

Historically, our sales in international markets were primarily through international brokers. However, as part of our strategy to establish direct, longer-term relationships with end-users, we have decreased our reliance on these brokers and have instead focused on direct sales to more profitable international markets.

All of our sales are on an order basis and have an average delivery time of 45 days. As a result, our production levels closely reflect our order log book status. We forecast sales trends in both the domestic and international markets based on historical data and general economic outlooks. We have our own data systems to remain informed of worldwide and Brazilian market developments. Our management believes that a key to our success is maintaining our presence in international markets, which provide us flexibility to shift between domestic and international markets depending on how favorable conditions are.

Unlike other commodity products, steel is not traded on an exchange, nor is there uniform pricing, due to wide differences in size, quality and specifications. In general, we price exports based on international spot prices of steel at the time of sale in U.S. dollars or euros, depending on the destination. Sales are normally paid up front, or within 14 or 28 days, and, in the case of exports, usually backed by a letter of credit and an insurance policy. Sales are made primarily on cost and freight terms.

Sales by Geographic Region

In 2021, we sold steel products to customers in Brazil and in 19 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 76% and 20%, respectively, of our export sales volume in 2021. The following table sets forth the geographic break-down of our steel product exports by destination:

Sales of All Steel Products by Destination												
<i>(in thousands of tons and millions of R\$)</i>												
	2019				2020				2021			
	Tons	% of Total	Net Operating Revenues	% of Total	Tons	% of Total	Net Operating Revenues	% of Total	Tons	% of Total	Net Operating Revenues	% of Total
Brazil	3,151	68%	10,028	72%	3,204	69%	11,721	71%	3,176	69%	21,400	71%
Export	1,374	30%	3,921	28%	1,447	31%	4,882	29%	1,427	31%	8,691	29%
Total	4,525	97%	13,949	100%	4,651	100%	16,603	100%	4,602	100%	30,091	100%
Exports by Region												
Asia	1	0%	47	1%	0	0%	0	0%	0	0%	0	0%
North America ¹	205	15%	561	11%	221	15%	922	19%	285	20%	2,276	26%
Latin America	44	3%	332	7%	73	5%	328	7%	68	5%	356	4%
Europe	1,124	82%	2,979	61%	1,152	80%	3,627	74%	1,089	76%	6,060	70%
All others	0	0%	2	0%	1	0%	4	0%	0	0%	0	0%

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

Sales by Product

The following table sets forth our sales breakdown by product in Brazil in the periods indicated:

Domestic Sales Breakdown	2019	2020	2021
Hot-rolled products	35%	33%	41%
Cold-rolled products	18%	18%	14%

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Galvanized products	31%	31%	28%
Tin plates products	9%	10%	10%
Long steel	7%	7%	7%

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 the periods indicated:

Sales Breakdown	2019	2020	2021
	<i>(in percentages of total domestic volume shipped)</i>		
Distribution network	37%	36%	32%
Industrial	11%	16%	17%
Packaging	10%	11%	11%
Automotive	16%	10%	12%
Home appliances	9%	10%	11%
Construction	17%	18%	17%

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 largest 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 5. Operating and Financial Review and Projects—5A. Operating Results—Overview—Steel Market—Product Mix and Prices" and "—Results of Operations—Year 2021 Compared to Year 2020—Net Operating Revenues."

Seasonality

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

Long Steel – SWT

Our long steel products are sold both in Germany (approximately 30%) and other countries, mainly in Europe (approximately 60%), for use in 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 customers. 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 the relevant Incoterms and section type. As a result, our production levels closely reflect our order log book status. We forecast sales trends in both the European and export markets based on the historical data available from the last two years and the general economic outlook for the near future. We believe that our presence in the export market outside of Europe gives us more flexibility to optimize production and maximize our profitability.

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

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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, we started the production of long steel in Volta Redonda. This plant has production capacity of 500 kt/year 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, we developed our products using high technology and in accordance with the highest quality and sustainability standards.

Our commercial team has its own sales force dedicated to meet all the needs of the long steel market: small customers as well as large wholesalers. We count with strategically located distribution centers to deliver our products throughout Brazil. In order to provide a wide range of products for the civil construction segment, we include in our product portfolio, in addition to cement and structural section products derived from flat steel, products such as tiles and tubes, among others.

Iron Ore

Iron ore products are commercialized by our teams 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, including 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 customers in order to help determine the product mix that best suits each particular customer.

We first entered the international iron ore market in February 2007, upon 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 handle and export iron ore and to load from our own facilities the first shipment of our iron ore products.

In 2021, our iron ore sales reached 33.2 million tons, of which 28.3 million tons were sales to third parties and 4.9 million tons were sales to our steel mills, which represents an increase of 6.7% compared to 2020. Total mining net revenue increased 42% in 2021, due to higher prices and higher volumes. The share of mining segment revenue in our total net revenue, however, decreased from 42.1% in 2020 to 37.7% in 2021.

In 2021, 87.9% of our iron ore export sales went to the Asian market, mainly China, and 12.1% were sold in the European market. Of our total sales volume to third parties, 91% were sinter feed and 9% lump ore.

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 customer base of approximately 25,000 customers, including construction material stores, home centers, concrete producers, construction companies, mortar industries and cement artifact producers.

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

[Table of Contents](#)**Insurance**

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 our following branches and subsidiaries: Presidente Vargas Steelworks, CSN Mineração and TECON. We annually renew this policy with domestic and foreign insurers and reinsurers. Our current policy, valid until June 2022, provides for limited indemnity of US\$475 million 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. For more information, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—Our insurance policies may not be sufficient to cover all our losses.”

Intellectual Property

We maintain a dedicated team to manage our intellectual property portfolio, which include trademarks, patents, know-how, trade secrets and industrial designs. This team ensures adequate protection for our intellectual assets, the pursuit of best knowledge management practices and explores the possibility of new business generation through technology transfer agreements, among others.

Our intellectual property team also supports our open innovation agenda by designing the legal framework needed for cooperation agreements with external partners like universities and research institutes, which is essential to enhance our knowledge generation, foster technical cooperation for the development of new, improved and more sustainable processes, products and operations.

Competition in the Steel Industry

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

Competition in the Brazilian Steel Industry

The following table sets forth the production of crude steel by Brazilian companies in the periods indicated:

Year	2019	2020
	<i>Production (in millions of tons)</i>	
Flat Steel		
Gerdau	6.3	6.2
Usiminas	3.3	2.8
ArcelorMittal Tubarão	6.3	5.0
CSN	3.0	3.8
Long Steel		
Ternium Brasil	4.4	4.1
Other	6.4	9.5
Total	32.6	31.4

Source: IABr

* 2021 data was not available as of the date of this annual report.

Competition in the Global Steel Industry

In 2021, Brazil maintained its place as the largest producer of crude steel in South America, with a production output of 36 million tons and a 1.85% share of total global production, according to data from the World Steel Association, or WSA. In 2021, Brazil maintained the ninth position in the global steel production ranking, accounting for 79% of total production in South America.

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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 margins 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—Regulatory Matters—Protectionist Measures" for a description of protectionist measures adopted by steel-importing countries that could adversely affect our competitive position in the global steel industry.

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.

ESG – Environmental, Social and Governance Matters

We are committed, in particular by means of our integrated sustainability and health, safety and environment policy, to enhance the sustainability of our businesses ethically, transparently and through continuous improvement in our management mechanisms to protect the environment and prevent the occurrence of pollution and accidents. Our initiatives consider all applicable laws and regulations and include employee training in order to foster a common vision of sustainable development and social responsibility.

In furtherance of this commitment, we continuously evolve our ESG practices and invest in sustainability initiatives to mitigate the risks inherent in our business activities, present opportunities to enhance our processes and respond to the demands of an increasingly ESG-concerned market. These investments include processes and equipment that offer modern and reliable technologies for monitoring and control of environmental risks.

Since 2020, we have been reviewing studies from leading ESG advisors and index providers (including ISS, Sustainalytics, MSCI, S&P Global, FTSE4Good Index and the B3's Corporate Sustainability Index, among others), and we have identified our main ESG gaps and opportunities, which we have ranked and delegated internally to areas that will collaborate in the development of action plans to address them pursuant to timeframes that we are, as of the date of this annual report, defining. In 2021, we conducted a climate-related financial analysis, according to the framework set forth by the Task Force on Climate-Related Financial Disclosures, or TCFD. In addition, we have consulted our main stakeholders in order to determine the priority of environmental, social and governance matters to consider in our sustainability strategy.

In 2021, we hosted our second annual ESG week to foment discussion of relevant environmental, social and governance matters and considerations. Members of the CSN Foundation and certain of our executives, as well as external guests, discussed ESG trends and opportunities and CSN's role and initiatives.

In addition, in February 2021, we installed our ESG committee, which is an advisory committee to our board of directors. Our ESG committee is responsible for supporting our board of directors by submitting proposals for, and monitoring, corporate projects in the following action pillars: sustainable finance, social practice, technology and operational sustainability, governance and diversity and inclusion. Our ESG committee is also responsible for identifying ESG risks, including those of a regulatory or commercial nature, and presenting ideas to enhance our adaptability and resilience in light of ESG risks. In addition, our ESG committee is responsible for developing a database related to our sustainability and governance initiatives in order to reliably report ESG risks and metrics and foment awareness of ESG matters within our corporate culture.

Following is an overview of our main ESG initiatives in 2021:

Environmental Matters

We continuously seek to transform natural resources into sources of economic prosperity through sustainable projects. In 2021, we continued our sustainability initiatives to mitigate and offset the environmental impacts of our activities by allocating R\$420.5 million to environmental initiatives (same amount allocated in 2020). Our investments in environmental sustainability in 2021 were mainly related to: (i) operation, maintenance and retrofitting of environmental control equipment; (ii) development of environmental studies for permit applications; and (iii) environmental management system and environmental compliance programs.

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In order to enhance our environmental governance, in 2021, we developed new policies relating to our environmental commitments: our biodiversity policy and our water resources policy.

In addition, on an ongoing basis, we develop environmental education projects to promote understanding and appreciation of Brazil's historical and natural heritage, especially in the Arcos and CSN Mineração plants in the state of Minas Gerais. In 2021, our environmental education project program began in Presidente Vargas Steelworks.

We have implemented our environmental management system in Casa de Pedra mine, Presidente Vargas Steelworks, Porto Real, Bocaina mine, CSN Paraná, the TECON port and Prada Distribuição, in each case in accordance with ISO 14001:2015, as certified by an independent firm and accredited by INMETRO. In 2021, we also implemented our environmental management system in our cement plants in Arcos and the TECAR port, in each case in accordance with ISO 14001:2015.

Climate Change

Since 2010, we have conducted an inventory of greenhouse gas emissions following the guidelines of the GHG Protocol. We have aimed to optimize our carbon management, risk mitigation and adaptation to climate change and, in 2021, for the seventh consecutive year, we received GHG Protocol's Golden Seal for reporting emissions from all our units and submitting them to external verification. Also, in 2021, we carried out the first report by CSN Mineração on greenhouse gas emissions and already achieved the GHG Protocol's Golden Seal. In addition, we annually report to the climate change module of the Carbon Disclosure Project and our score was recently upgraded from C to B.

In 2021, we adopted the TCFD framework for management of climate-related risks and opportunities. Our objective was to identify current and potential future climate change risks and opportunities that may generate a material change in our business operations or financial metrics, and to develop a plan to prepare for or mitigate these risks and to prepare for and seize these opportunities.

In 2021, we also sought to further develop our strategy for management of climate-related risks and opportunities by building marginal abatement cost – MAC – curves to assess projects that could improve our production efficiency and technologies available for our operations and the possible contributions that each could make to reducing our greenhouse gas emissions. With this data, we were able to consider greenhouse gas reduction targets and we will be able to calculate our internal carbon price.

Our greenhouse gas reduction targets (measured as tCO_{2e} / ton of production) considering our Scope 1 and Scope 2 greenhouse gas emissions contemplate: (i) CSN's Mineração's aggregate reduction of 30% by 2035 and carbon neutrality by 2050; (ii) in our steel production, an aggregate reduction of 20% by 2035; and (iii) in our cement production, an aggregate reduction of 28% by 2030. We expect these reductions in greenhouse gas emissions will result from our existing expansion and efficiency projects, and therefore do not foresee that we will require any specific investments in order to meet these targets.

Water Resources

Water is one of the main inputs for our production processes, especially in our steel and mining segments. With the introduction of new technologies for filtering and dry stacking of tailings, we have significantly reduced water consumption in our mining operations. In 2021, as a result of dry mining processes, we were able to reduce by 20% the consumption of fresh water by CSN Mineração's central mineral processing plant. In 2021, CSN Mineração became one of the first Brazilian mining companies to conduct a water footprint analysis, mapping all of its water uses, losses, gains and opportunities, which analysis helped CSN Mineração to achieve 87% of water reuse in its operations in 2021.

In addition, in 2021, Presidente Vargas Steelworks had a water reuse rate of at least 94% and was one of the first steelmaking units in the world to conduct a water footprint analysis. Based on risk assessment methodologies of the World Wildlife Fund's Water Risk Filter and the World Resources Institute's Aqueduct, in 2020, we began analysis of our exposure to water risks, considering our processes and nearby watersheds.

We annually report to the water security module of the Carbon Disclosure Project and our score was recently upgraded from C to B-.

Materials

In our integrated sustainability and health, safety and environment policy, we set forth the importance of our environmental management through principles to reduce, reuse and recycle materials in our processes in order to optimize the use of natural resources. These principles are inherent in our processes as a fully integrated

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company. For example, we reuse all of our blast furnace slag in our production of cement and all of our metal scrap in our production of long steel.

Biodiversity

We contribute to the protection of 77 thousand hectares of natural areas representing, in the aggregate, approximately four times the area occupied by our operations. In addition, for more than 16 years we have carried out programs for monitoring fauna and flora in the areas subject to impact by our operations.

Our ESG committee has biodiversity as one of its priority agenda items and has formed a working group to develop action plans to protect the biomes where our operations are conducted.

Tailings Dams

Our environmental guidelines and management include monitoring of our tailings dams, which are inactive and subject to our ongoing decommissioning or decharacterization plan. On an annual basis, all of 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 “—Our Mining Segment—Dams.”

We have been a global leader in the mining industry in mining waste management, having invested approximately R\$400 million in technologies to reduce tailings deposits and, since 2020, we no longer dispose tailings in our dams, using dry stacking to stock this material. We use the Casa de Pedra dam only for water recirculation and we do not operate any active upstream tailings dams.

In 2020, we finalized the decharacterization of our first tailings dam, the B5 Dam. In 2021, we finalized the decharacterization of CSN Mineração’s tailings dam, Vigia auxiliary dam. All of CSN Mineração’s tailings dams are at the zero emergency level according to the ANM, and have received declarations of stability from the ANM. In 2022, we are advancing in the decharacterization of CSN Mineração’s remaining tailings dams.

Social Matters

Human Rights

In 2020, we became a signatory of the Global Compact, pursuant to which we committed to abide by its principles to support and respect the protection of internationally proclaimed human rights and to ensure that we are not complicit in human rights abuses.

In 2021, we conducted an extensive benchmark and internal analysis focused on the development of a new human rights policy, which we will launch in 2022 when we implement our first formal human rights diligence process based on principles set forth by the United Nations.

Gender Balance

We promote a zero-tolerance commitment to any type of discrimination, as set forth in our Code of Ethics. We believe that an inclusive and diverse environment is critical to stimulate innovation and guarantee the continuity of our business. We also believe that an inclusive approach is essential to eliminate barriers in hiring and retaining women employees and executives and to reap the improved performance generated by gender diversity. In 2020, we set the bold target to double our female workforce by 2025, from 14% to 28%. In 2021, we reached a female workforce of 18%, representing an increase of 28% as compared to 2020.

In 2021, we also sought to increase female representation at our executive level. CSN Mineração’s board of directors included two women, as did CSN Cimentos’ board of directors.

Local Communities

In 2021, the CSN Foundation invested R\$103 million in 104 projects supporting local communities where we conduct our operations. This investment represented an increase of 112% as compared to 2020. From 2003 to 2021, we have invested, from our own resources, an aggregate of R\$391 million in the areas of culture, sports and health, directed to children, adolescents and the elderly, and have continuously broadened our social activities.

[Table of Contents](#)**Safety and Health**

Safety is a top priority and, in 2021, we achieved our lowest frequency rate of accidents since 2013 with or without lost time: 2.4 accidents / million hours worked, which represented a decrease of 2.4% as compared to 2020.

In 2021, we began the preliminary process for compliance in our cement plant in Arcos with the health and safety certification ISO 45001:2018. We expect to conclude this certification process in 2022, upon which this will be the first cement plant in Brazil to hold this safety certification.

With regards to occupational health, in 2020 and 2021, we concentrated our efforts in implementing measures to prevent the spread of COVID-19 among our workforce and communities. We established a dedicated committee to deliberate on COVID-19 matters and we promptly adopted all recommended protocols by donating masks, hand sanitizers and cleaning products; reinforcing hygiene practices in our work areas; testing employees when applicable; and adopting remote work arrangements for individuals in risk groups. These measures demonstrated our commitment to the well-being of our employees and communities.

Once vaccines against COVID-19 were made available in Brazil, we established partnerships with the municipalities in which our employees are located in order to promote the vaccination of our employees. By December 31, 2021, 75% of our employees were fully vaccinated and 94% of our employees had received at least one vaccine dose.

Governance Matters

We continuously seek to develop mechanisms that improve our governance. In 2020, we instituted a sustainability, environment, health and safety executive department, which reports directly to our chief executive officer and focuses on implementing consistent governance throughout our corporate group.

Compliance

We have a Code of Ethics that reinforces our ethical standards and the values that apply to all of our employees, including executive officers and directors. Instances of non-compliance with our Code of Ethics or with other policies, whether by employees, executive officers, directors, suppliers or service providers, are subject to disciplinary measures, ranging from verbal or written warnings to suspension or dismissal or, in the case of third parties, termination of the relationship. We maintain a whistleblower channel for reports of suspected instances of non-compliance with our Code of Ethics or with other policies.

For more information on our Code of Ethics, see "Item 16. Reserved—16B. Code of Ethics."

Regulatory Matters**Environmental Regulation**

We are subject to Brazilian federal, state and municipal environmental laws and regulations governing air emissions, water waste 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 we are in material 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 (*Ministério do Meio Ambiente – MMA*), which, in turn, has the consultative and deliberative board CONAMA, 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 state government of Rio de Janeiro and the municipality of Volta Redonda, and supervised by 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*), the Regional Superintendent of Environment and Sustainable Development (*Superintendência Regional de Meio Ambiente – SUPRAM*), the Superintendency of Priority Projects (*Superintendência de Projetos Prioritários – SUPPRI*), the

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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 – 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 – SEMAD*), 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 or 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, 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 3. Key Information—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 “—We are subject to environmental, health and safety incidents and current, new or more stringent regulations may result in liability exposure and increased capital expenditures.”

Mining Regulation

Under the Brazilian Federal Constitution of 1988, or the Brazilian Constitution, all mineral resources in Brazil belong to the federal government. The Brazilian Constitution, the Brazilian Mining Code (*Código de Mineração*) enacted through Decree Law 227/1967, or the Mining Code, and mining regulations enacted through Decree 9,406/2018 impose various regulatory restrictions on mining companies relating to, among other things:

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

The Mining Code also imposes certain notifications and reporting requirements.

Mining companies in Brazil can only prospect and mine pursuant to prospecting authorizations or mining concessions granted by the ANM. The ANM grants prospecting authorizations to a requesting party for an initial period of one to three years. These authorizations are renewable at the 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 the ANM. If the geological exploration reveals the existence of a mineral deposit that is technically and economically exploitable, the grantee has one year (which the ANM may extend) from approval of the report by the 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. The 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 the 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.

After accidents involving the breaking of upstream mining dams operated by other mining companies in the cities of Mariana and Brumadinho in the state of Minas Gerais, the ANM and Brazilian environmental regulatory authorities have applied more stringent environmental licensing requirements for mining project

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operations, specifically for dams. For more information, see “Item 3. Key Information—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 “—We are subject to environmental, health and safety incidents and current, new or more stringent regulations may result in liability exposure and increased capital expenditures.”

Mining Concessions

We operate our iron ore mining activities at Casa de Pedra mine under a mining concession known as *Manifesto de Mina* under Brazilian regulations, which gives us the right to extract 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 Bocaina mine and our tin mining activities at Ariquemes (ERSA mine) are based on concessions under similar conditions.

The *Manifesto de Mina* for Casa de Pedra mine and the Engenho mining concession are held by CSN Mineração, while the Fernandinho mining concession and the mining rights of Cayman and Pedras Pretas are held by Minérios Nacional.

For further information on our concessions, see “—4D. Property, Plant and Equipment.”

Mineral Rights and Ownership

Our mineral rights for Casa de Pedra mine include the mining concession, a beneficiation plant, roads, a loading yard and a railway branch, and are duly registered with the ANM. We have also been granted by the 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 gross revenue, excluding taxes on sales. The ANM is responsible for auditing mining companies and enacting regulations to ensure proper payment of CFEM.

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 landowners the results of their exploration (at a rate of 50% of the applicable 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.

Antitrust Regulation

We are subject to various laws in Brazil which seek to maintain a competitive commercial environment. 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 CADE. This law introduced a mandatory pre-merger notification system, as opposed to the post-merger review system previously in force. CADE comprises an Administrative Tribunal of

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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 or restrictions to, mergers and acquisitions transactions (for instance, require a company to divest assets or adopt other measures that CADE deems appropriate to guarantee a competitive environment) should it determine that the relevant industry is insufficiently competitive or that the transaction creates a market concentration that can affect competition.

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

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 Special Secretary of Foreign Trade and International Business (*Secretaria de Comercio Exterior e Negócios Internacionais – SECINT*), the Secretary of Foreign Trade (*Secretaria de Comércio Exterior – SECEX*) and the Subsecretary of Trade Defense and Public Interest (*Subsecretaria de Defesa Comercial e Interesse Público - SDCOM*). Worldwide, our exports are subject to the protectionist measures summarized below.

United States: Anti-dumping (AD) and Countervailing Duties (CVD)

In the United States, we are subject to regulation and supervision by the U.S. Department of Commerce, or DOC, the ITC, the International Trade Administration, or ITA, and the Import Administration, or IA.

Cold-Rolled Products

In July 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 with the ITC and the DOC. In August 2015, the DOC initiated both AD/CVD investigations with respect to cold-rolled steel from Brazil. In September 2015, the ITC announced affirmative preliminary injury determinations with respect to cold-rolled imports from Brazil.

In June 2021, the five year “sunset review” of the AD/CVD orders on cold-rolled steel from Brazil was initiated. In September 2021, the ITC determined to conduct a full review to begin in the first quarter of 2022 with a final decision expected in August 2022.

Hot-Rolled Products

In August 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. In September 2015, the DOC initiated both AD/CVD investigations with respect to hot-rolled steel from Brazil and the ITC announced affirmative preliminary injury determinations with respect to hot-rolled steel imports from Brazil.

The final determination for cold-rolled products 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, imposing a rate of 11.31% for CVD and a rate of 33.14% for AD with a cash deposit of 29.07%.

In April 2017, the President of the United States, Donald Trump, requested an investigation under Section 232 of the U.S. Trade Expansion Act to determine if steel imports were harming U.S. national security. As a result of this investigation, in March 2018, the U.S. government implemented Section 232 measures and imposed 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

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into an agreement with the United States, 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%. Section 232 subjects us to a quota for exports of slabs, cold and hot-rolled steel sheets, pre-painted corrosion resistant, Al-Zn and tin mill products. However, because our cold and hot-rolled products are already subject to AD duties and CVD tariffs, these exports are unaffected by Section 232 measures. While we do not believe Section 232 measures have materially affected our exports because the quotas are not always reached, we would expect that a lifting of these measures would result in increased exports to the United States depending on demand.

European Union: Anti-dumping

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

Hot-Rolled Products

In July 2016, the European Commission initiated an AD investigation concerning imports of certain hot-rolled flat steel products originating from Brazil, Iran, Russia, Serbia and Ukraine. The investigation was limited 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, CSN, Usiminas and Arcelor Mittal, collectively responsible for 97% of total steel exports from Brazil to the European Union, were chosen as part of the sample subject to 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 issued a final determination imposing definitive AD duties for the exports of hot-rolled steel products into the European Union from Brazil. The duties imposed were a tariff rate of 53.4 euros/ton for CSN, 63 euros/ton for Usiminas, 54.5 euros/ton for Arcelor Mittal and 55.8 euros/ton for Gerdau.

Tin Free Steel

In September 2021, the European Commission initiated an AD investigation concerning imports of electrolytic chromium coated steel (tin free steel) products originating from Brazil and China. Provisional measures, if any, will be applied as late as May 2022 and the conclusion of the investigation is expected in the last quarter of 2022.

Prompted by the United States' adoption of Section 232 measures, the European Union initiated, in April 2018, an investigation into safeguards for imports of 26 categories of steel products. In February 2019, a definitive E.U. regulation imposed safeguard measures on imports of hot-rolled, cold-rolled and tin mill 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. Unlike the U.S. quotas pursuant to Section 232, the E.U. quotas provide for imports above the quota, subject to a 25% tariff. Because our hot-rolled products are already subject to AD duties, these exports are unaffected by the E.U. quotas. In the case of our cold-rolled and tin mill products, because the E.U. quotas have not been reached since implemented, these exports have also been unaffected. In June 2021, the European Commission decided to extend the E.U. safeguard measures on certain steel products.

In December 2021, the European Commission published in the E.U. Official Journal a notice of initiation concerning a review of the safeguard measures applicable to imports of certain steel products, which review will be concluded by June 2022.

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."

[Table of Contents](#)*Canada*

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*Global Steel Industry*

The global 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 two-thirds 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 one-third 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.

In 2019, global crude steel production was 1,869.9 million tons, which represented an increase of 3.4 million tons, or 0.2%, as compared to 2018, due to an increase in crude steel production in Asia and the Middle East, while crude steel production decreased in all other countries.

In 2020, global crude steel production was 1,864 million tons, which represented a decrease of 5.9 million tons, or (0.9)%, as compared to 2019, due to a decrease in crude steel production in all countries except Asia and the Middle East.

In 2021, global crude steel production was 1,950 million tons, which represented an increase of 86 million tons, or 3.7%, as compared to 2020, due to an increase in crude steel production in all countries except China, Malaysia, Indonesia and Iran.

Brazilian Steel Industry

Since the 1940s, steel has been of vital importance to the Brazilian economy. During the 1970s, significant 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.

Privatization

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 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

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decreased from 147 kilograms in 2010 to 110 kilograms in 2019. It is considered low when compared to the levels of developed countries such as the United States and Germany.

According to the IBGE, Brazil's GDP grew by 1.1% in 2019 and sharply contracted by 4.1% in 2020 due to global effects of developments relating to the COVID-19 pandemic. While crude steel production was 31.0 million tons in 2020, representing a decrease of 4.9% as compared to 2019, mainly due to equipment stoppage in the second quarter of 2020, domestic sales increased 2.4% to 19.2 million tons.

In 2021, Brazil's GDP grew by 4.6% and crude steel production increased 16% as compared to 2020, which represented an increase of 11.7% as compared to 2019.

The Brazilian flat steel sector is shifting production to the higher value-added consumer durable sector, which is highly dependent on domestic consumer confidence that, 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 2020, according to IABr, the apparent consumption of steel in Brazil increased 1.2% as compared to 2019. In 2021, the apparent consumption of steel in Brazil increased 23.2% as compared to 2020.

Market Participants

According to IABr, the Brazilian steel industry comprises 31 mills managed by 12 corporate groups, with an aggregate installed annual capacity of approximately 51 million tons, producing a full range of flat, long, carbon, stainless and specialty steel.

Capacity Utilization

Installed capacity in Brazil in each of 2020 and 2021 was estimated at approximately 51.5 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. 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 2019, steel imports reached 2.3 million tons, which represented a decrease of 2.0% as compared to 2018, and steel exports decreased 1.1 million tons, or 8.0%, as compared to 2018. In 2020, steel imports reached 2.0 million tons, which represented a decrease of 17.7% as compared to 2019, and steel exports decreased 2.2 million tons, or 13.8%, as compared to 2019. In 2021, steel imports reached 4.9 million tons, which represented an increase of 144% as compared to 2020, and steel exports increased 0.5 million tons, or 4.0%, as compared to 2020.

For information on the production by the largest Brazilian steel companies, see “—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 in this annual report.

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 four 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, 2021. For more information, see note 9 to our audited consolidated financial statements included elsewhere in this annual report.

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Description	Activity	Country	State	City	Title
CSN	Presidente Vargas Steelworks	Brazil	Rio de Janeiro	Volta Redonda	Owned
CSN	CSN Paraná	Brazil	Paraná	Araucária	Owned
CSN	CSN Porto Real	Brazil	Rio de Janeiro	Porto Real	Owned
CSN	Service Center	Brazil	São Paulo	Mogi das Cruzes	Owned
CSN Cimentos	Distribution Center	Brazil	São Paulo	Mogi das Cruzes	Owned
CSN	Service Center	Brazil	Bahia	Camaçari	Owned
Companhia Metalúrgica Prada	Service Center	Brazil	São Paulo	Mogi das Cruzes	Owned
Companhia Metalúrgica Prada	Service Center	Brazil	São Paulo	Bebedouro	Owned
Companhia Metalúrgica Prada	Steel Can Manufacturer	Brazil	São Paulo	São Paulo	Owned
Companhia Metalúrgica Prada	Steel Can Manufacturer	Brazil	Minas Gerais	Uberlândia	Owned
CSN Cimentos	Distribution Center	Brazil	Minas Gerais	Uberlândia	Owned
CSN Mineração	Iron Ore Mine	Brazil	Minas Gerais	Congonhas	Owned and Third Parties
CSN Cimentos	Arcos Mine	Brazil	Minas Gerais	Arcos	Owned
CSN Mineração	Ouro Preto Mine	Brazil	Minas Gerais	Ouro Preto	Owned
Minérios Nacional	Fernandinho Mine	Brazil	Minas Gerais	Rio Acima	Third Parties
ERSA	ERSA Office	Brazil	Rondonia	Ariqemes	Owned
ERSA	ERSA Mine	Brazil	Rondonia	Itapua do Oeste	Owned
Companhia Siderúrgica Nacional, LLC	CSN LLC Office	USA	Illinois	Chicago	Third Parties
Lusosider Aços Planos S.A.	Lusosider	Portugal	Seixal	Seixal	Owned
Stahlwerk Thüringen GmbH	SWT	Germany	Saalfeld-Rudolstadt	Unterwellenborn	Owned
CSN	Thermoelectric Plant	Brazil	Rio de Janeiro	Volta Redonda	Owned
Companhia Metalúrgica Prada	Metallic Packaging Plant	Brazil	Rio de Janeiro	Resende	Third Parties
Companhia Metalúrgica Prada	Metallic Packaging Plant	Brazil	Rio Grande do Sul	Pelotas	Third Parties
Companhia Metalúrgica Prada	Metallic Packaging Plant	Brazil	Rio de Janeiro	Barão de Juparanã	Owned
Companhia Metalúrgica Prada	Distribution Center	Brazil	São Paulo	Salto	Third Parties
Consórcio Usina Hidrelétrica de Igarapava	Hydroelectric Facility	Brazil	São Paulo	Igarapava	Owned
Itá Energética S.A.	Hydroelectric Facility	Brazil	Rio Grande do Sul	Aratiba	Owned
CSN	Distribution Center	Brazil	Rio Grande do Sul	Canoa	Third Parties
Companhia Metalúrgica Prada	Distribution Center	Brazil	São Paulo	Piracicaba	Third Parties
Companhia Metalúrgica Prada	Distribution Center	Brazil	Minas Gerais	Contagem	Third Parties
CSN	Steel Distribution Center	Brazil	Minas Gerais	Contagem	Third Parties
CSN Cimentos	Distribution Center	Brazil	São Paulo	Mauá	Third Parties

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CSN Cimentos	Distribution Center	Cement Distributor	Brazil	São Paulo	Ribeirão Preto	Third Parties
CSN	Distribution Center	Steel Distributor	Brazil	Rio Grande do Sul	Caxias do Sul	Third Parties
CSN Mineração	TECAR - Terminal de Carvão	Iron Ore Shipment	Brazil	Rio de Janeiro	Itaguaí	Third Parties
TECON	TECON - Terminal de Containers	Logistics	Brazil	Rio de Janeiro	Itaguaí	Third Parties
CSN Cimentos	Cement Plant	Cement Manufacturer	Brazil	Rio de Janeiro	Volta Redonda	Third Parties
CSN Cimentos	Clinker and Cement Plant	Cement Manufacturer	Brazil	Minas Gerais	Arcos	Owned
CSN	Long Steel Plant	Long steel Manufacturer	Brazil	Rio de Janeiro	Volta Redonda	Owned
MRS	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
FTL	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
TLSA	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	Rio de Janeiro	Rio de Janeiro (Arará)	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	Rio de Janeiro	Rio de Janeiro (Campo Grande)	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	São Paulo	Americana	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	Rio de Janeiro	Queimados	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	São Paulo	São José dos Campos	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	São Paulo	Osasco	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	Rio de Janeiro	Itaboraí	Third Parties
CSN Cimentos	Distribution Center	Cement Distributor	Brazil	Rio de Janeiro	Barra Mansa	Third Parties
CSN	Distribution Center	Steel	Brazil	São Paulo	Jacareí	Third Parties
CSN	Distribution Center	Distributor	Brazil	São Paulo	Vargem G. Paulista	Third Parties
Elizabeth Cimentos S.A.	Cement Plant	Cement Manufacturer	Brazil	Paraíba	Alhandra	Owned
Elizabeth Mineração Ltda.	Mine	Limestone Mine	Brazil	Paraíba	Pitimbu	Owned

For information on environmental matters with respect to certain of the facilities described above, see “Item 8. Financial Information—8A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings.” In addition, for information on our plans to construct, expand and improve our facilities, see “—Acquisitions and Dispositions” and note 9 to our audited consolidated financial statements included elsewhere in this annual report.

Acquisitions and Dispositions*CSN Mineração*

In February 2021, we sold part of our stake in CSN Mineração as part of its initial public offering in Brazil. As of December 31, 2021, we held 78.24% equity interest in CSN Mineração.

Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda.

In August 2021, our cement subsidiary, CSN Cimentos, acquired Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda., which operate in the Northeast region of Brazil. This acquisition increased our cement production capacity by 1.3 million tons from 4.7 million tons to 6.0 million tons. On April 30, 2022, the company Elizabeth Mineração Ltda. was fully merged into CSN Cimentos, after approval by the company’s shareholders and directors on April 29, 2022. In this sense, CSN, as the parent company of CSN Cimentos, will become a signatory part of shareholder agreement.

LafargeHolcim (Brasil) S.A.

In September 2021, CSN Cimentos entered into a share purchase and sale agreement to acquire the entirety of LafargeHolcim (Brasil) S.A., at a base value of US\$1,025.0 million, subject to certain price adjustments. This acquisition, once consummated, will add 10.3 million tons of cement per year to our production capacity, bringing our total production capacity to 16.3 million tons of cement per year, by means of plants strategically located in the Southeast, Northeast and Midwest regions of Brazil, as well as substantial high-quality limestone reserves. As of the date of this annual report, the consummation of this acquisition remains subject to approval by CADE.

Metalgráfica Iguazu S.A.

In November 2021, we entered into an agreement to incorporate the entirety of the outstanding shares of Metalgráfica Iguazu S.A., which, operating in Ponta Grossa, in the state of Paraná, and Goiânia, in the state of Goiás, produces steel cans for the national and international market of metal food packaging. This acquisition, once consummated, will improve the competitiveness, and represents a strategic step in expanding the capacity, of our packaging division. This acquisition was approved by CADE in April 2022.

For more information, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—We may not be able to consummate proposed acquisitions or integrate acquired businesses successfully” and, for information regarding recent developments relating to acquisitions, see “Item 4. Information on the Company—4A. History and Development of the Company—Recent Developments—Acquisitions of Santa Ana Energética S.A. and Topázio Energética S.A.”

[Table of Contents](#)**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 included elsewhere in this annual report.

5A. Operating Results**Overview***Brazilian Macroeconomic Scenario*

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

The following table sets forth select Brazilian macroeconomic indicators for the periods indicated:

	Year ended December 31,		
	2019	2020	2021
GDP growth (contraction) rate	1.1%	(4.1)%	4.6%
Inflation (IPCA) ⁽¹⁾	4.3%	4.5%	10.06%
Inflation (IGP-M) ⁽²⁾	7.3%	23.1%	23.14%
CDI ⁽³⁾	6.0%	2.8%	4.4%
Appreciation (depreciation) of the <i>real</i> against the U.S. dollar (end of period)	(4.0)%	(28.9)%	(7.3)%
Exchange rate at the end of period (US\$1.00)	R\$4.030	R\$5.197	R\$5.580
Average exchange rate (US\$1.00)	R\$3.945	R\$5.158	R\$5.340
Unemployment rate ⁽⁴⁾	11.0%	13.1%	12.6%

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

(1) The IPCA is measured by the IBGE.

(2) The IGP-M is measured by the Fundação Getulio 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.

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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 on 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 4.3%, 4.5% and 10.1%, in 2019, 2020 and 2021, respectively, and was 7.3%, 23.1% and 23.1%, respectively 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, certain of our *real*-denominated debt is indexed to consider 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, 2019, 2020 and 2021 was 6.0%, 2.8% and 4.4%, respectively.

Steel Market

In December 31, 2019, 2020 and 2021, our steel segment represented 55%, 55% and 63% of our consolidated net revenues, respectively, and 12%, 22% and 45% of our consolidated gross profit, respectively. In each of 2020 and 2021, 71% of our steel revenues were from domestic sales and 29% were abroad, as compared to 72% and 28%, respectively, in 2019.

According to the WSA, global crude steel production was 1.95 billion tons in 2021, representing an increase of 3.7% compared to 2020 and an increase of 4.0% compared to 2019. In 2021, China was responsible

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for 1,033 million tons, or about 53%, of the global output, representing a decrease of 0.3% compared to 2020. India's crude steel production in 2021 was 118 million tons, representing an increase of 18.0% compared to 2019. In the European Union, production was 152.5 million tons in 2021, representing an increase of 9.9% compared to 2020. In the United States, crude steel production was 86 million tons in 2021, representing an increase of 19.4% compared to 2020.

According to IABR, domestic crude steel production was 36 million tons in 2021, or a 16.3% increase as compared to 2020, while rolled steel output was 26 million tons in 2021, or a 20.0% increase as compared to 2020.

Domestic steel product consumption in Brazil was 26 million tons in 2021, or a 26.8% increase compared to 2020, and domestic sales increased 15.4% to 22.4 million tons. Annual imports to Brazil were 4.9 million tons, or a 144.0% increase as compared to 2020, and exports increased 4.0%, from 10.5 million tons in 2020 to 11.0 million tons in 2021.

The WSA estimates that global steel demand, including China, totalled 1.912 billion tons in 2021, which represents an increase of 2.0% as compared to 2020. Crude steel production increased in 2021 in all regions of the world: South America by 17.8%, North America by 16.6%, European Union by 15.4% and Asia by 0.6%, in each case as compared to 2020.

Mining Market

In 2020, in the midst of the COVID-19 pandemic, China implemented a strong fiscal stimulus policy, principally in the infrastructure and housing sectors, which had a positive impact on the steel and iron ore market despite the otherwise struggling global company. Consequently, iron ore prices continued the upward trend and increased 16.6% from, US\$93.4/dmt in 2019 to US\$108.9/dmt in 2020. In 2021, as developed countries began to see recovering macroeconomic conditions amid large stimulus packages, iron ore prices reached their highest level in more than ten years in the first half of 2021. Despite decreased steel production in China in the second half of 2021 and lower iron ore prices, the 2021 annual average iron ore price was US\$159.5/dmt, which represented an increase of 46.5% from US\$108.9/dmt in 2020.

Chinese annual iron ore imports decreased to 1.127 billion tons in 2021, as compared to 1.156 billion tons in 2020, while the global seaborne iron ore market increased to 1.545 billion tons in 2021, as compared to 1.530 billion tons in 2020.

Logistics, Cement and Energy Markets

The performance of our logistics, cement and energy segments is directly related to the performance of our steel and mining segments. In 2019, 2020 and 2021, these segments represented an aggregate of 10%, 9% and 8% of our consolidated net revenues, respectively, and an aggregate of 5%, 7% and 6% of our consolidated 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 Market

Supply and Demand

Prices of steel are sensitive to (i) changes in worldwide and local demand, which in turn are affected by worldwide and country-specific economic cycles, and (ii) 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

Our steel products fall into four categories: hot-rolled, cold-rolled, coated and tin mill (tin free steel and steel plate).

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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. The following table sets forth a break-down of our sales volume by product:

	Sales Volumes									
	Tons			% of Sales Volumes						
	2019	2020	2021	In Market*			Total			
			2019	2020	2021	2019	2020	2021		
Domestic sales										
Slabs	0	-	-	0%	0%	0%	0%	0%	0%	
Hot-rolled	1,097	1,079	1,312	35%	34%	41%	24%	23%	29%	
Cold-rolled	562	589	444	18%	18%	14%	12%	13%	10%	
Galvanized	963	996	872	31%	31%	27%	21%	21%	19%	
Tin plate	303	314	327	10%	10%	10%	7%	7%	7%	
Long steel	227	225	221	7%	7%	7%	5%	5%	5%	
Subtotal	3,151	3,204	3,176	100%	100%	100%	70%	69%	69%	
Sales abroad										
Slabs	2	43	-	0%	3%	0%	0%	1%	0%	
Hot-rolled	55	54	95	4%	4%	7%	1%	1%	2%	
Cold-rolled	25	31	32	2%	2%	2%	1%	1%	1%	
Galvanized	423	483	481	31%	33%	34%	9%	10%	10%	
Tin plate	78	71	79	6%	5%	6%	2%	2%	2%	
Long steel	791	765	740	58%	53%	52%	17%	16%	16%	
Subtotal	1,374	1,447	1,427	100%	100%	100%	30%	31%	31%	
Total sales										
Slabs	2	43	-				0%	1%	0%	
Hot-rolled	1,152	1,134	1,407				25%	24%	31%	
Cold-rolled	587	620	476				13%	13%	10%	
Galvanized	1,386	1,479	1,353				31%	32%	29%	
Tin plate	381	385	406				8%	8%	9%	
Long steel	1,018	991	960				22%	21%	21%	
Total	4,525	4,651	4,603				100%	100%	100%	

*% of sales volume in the market means the participation of each product line in domestic sales and sales abroad.

As part of our strategy, we seek to increase 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									
	% of net operating revenues									
	2019	2020	2021	In Market*			Total			
			2019	2020	2021	2019	2020	2021		
Domestic sales										
Slabs	0	-	0	0%	0%	0%	0%	0%	0%	
Hot-rolled	2,770	3,217	7,676	28%	27%	36%	20%	19%	26%	
Cold-rolled	1,538	1,880	2,930	15%	16%	14%	11%	11%	10%	
Galvanized	3,456	3,977	6,349	34%	34%	30%	25%	24%	21%	
Tin plate	1,536	1,766	2,956	15%	15%	14%	11%	11%	10%	
Long steel	543	611	1,126	5%	5%	5%	4%	4%	4%	
Other products	185	270	362	2%	2%	2%	1%	2%	1%	
Subtotal	10,028	11,721	21,400	100%	100%	100%	72%	71%	71%	
Sales abroad										
Slabs	3	85	-	0%	2%	0%	0%	1%	0%	
Hot-rolled	130	156	633	3%	3%	7%	1%	1%	2%	
Cold-rolled	62	96	190	2%	2%	2%	0%	1%	1%	
Galvanized	1,364	1,877	3,495	35%	38%	40%	10%	11%	12%	
Tin plate	303	324	528	8%	7%	6%	2%	2%	2%	

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Long steel	1,980	2,245	3,699	51%	46%	43%	14%	14%	12%
Other products	78	98	147	2%	2%	2%	1%	1%	0%
Subtotal	3,921	4,882	8,691	100%	100%	100%	28%	29%	29%
Total sales									
Slabs	3	85	0	0%	1%	0%	0%	1%	0%
Hot-rolled	2,900	3,373	8,309	21%	20%	28%	21%	20%	28%
Cold-rolled	1,600	1,976	3,120	11%	12%	10%	11%	12%	10%
Galvanized	4,820	5,853	9,843	35%	35%	33%	35%	35%	33%
Tin plate	1,839	2,091	3,485	13%	13%	12%	13%	13%	12%
Long steel	2,524	2,856	4,824	18%	17%	16%	18%	17%	16%
Other products	263	369	510	2%	2%	2%	2%	2%	2%
Total	13,949	16,603	30,091	100%	100%	100%	100%	100%	100%

*% of sales volume in the market means the participation of each product line in domestic sales and sales abroad.

Accounting for Mining Production Used in 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 mines owned by CSN Mineração, which mines, in 2021, provided approximately 5.0 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 2019, 2020 and 2021, these costs were R\$834 million, R\$1,430 million and R\$2,939 million, respectively.

Critical Accounting Estimates

We prepare our consolidated financial statements 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 different or changed 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. 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.

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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. We understand this is a critical accounting policy due to the subjective criteria to determine future cash flows, which is subject to risks and uncertainties.

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.

We understand this is a critical accounting policy due to the uncertainties related to estimating the fair value of assets and liabilities on the date of an acquisition.

Derivatives

IFRS 9 – *Financial Instruments* requires that we recognize all derivative financial instruments as either assets or liabilities on our balance sheet and measure these instruments at fair value. We record changes in the fair value of derivatives in each period in our income statement in other comprehensive income, depending on whether we designate a transaction as an effective hedge. Certain derivative instruments do not qualify for hedge accounting, and, accordingly, we immediately record changes in the fair value of any of these derivative instruments in our income statement as financial income or financial expenses. For derivative instruments that do qualify for hedge accounting, we may first account for them as other comprehensive income, in net equity, and reclassify them to our income statement at the moment the underlying transaction occurs. In general, we use derivatives for cash flow 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 and commodity price risks associated with our debt, highly probable forecast transactions and the volatility of the Platts Iron Ore Index (62% Fe CFR China) that may affect our net results. Our hedging instruments are non-derivative monetary items. Therefore, we account for the effective portion of our cash flow hedges in other comprehensive income. We account for the ineffective portion of the gain or loss on the hedging instrument, if any, in profit or loss. With respect to the fair value measurement, we must make assumptions as to future foreign currency exchange, interest rates and commodities indexes.

We understand this is a critical accounting policy because it requires judgment in determining index locks in a highly volatile market.

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 30 to our audited consolidated financial statements included elsewhere in this annual report 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. Annually, a qualified actuary reviews our assumptions and calculates our net obligation with regard to our pension plans 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.

Certain of our entities also offered a postretirement healthcare benefit to their employees. 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.

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We understand this is a critical accounting policy because the determination of amounts related to our defined contribution pension plans depends on long-term actuarial assumptions, which are subject to uncertainties.

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 projected future taxable income and the expected timing of the reversals of existing temporary differences. If we 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 on our balance sheet, we assess if the future taxable income will support the realization of the tax credits or if we must recognize any valuation allowance. We prepared this study at entity level, in accordance with Brazilian tax legislation, and consider our projections both for the parent company, since the major part of our recent tax losses and temporary differences are generated in the parent company, and for our Brazilian operating subsidiaries that present temporary differences. We have recognized a valuation allowance for these subsidiaries and we assess the recoverability of their tax credits. For those that begin to operate profitably and present a probability of generating future taxable income, we begin to recognize tax credits by reversing the valuation allowance applied in prior years.

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

Nature	Description
<i>Tax losses</i>	We incur tax losses at the parent company level because (i) of financial expenses on our leverage because we hold substantially all loans and financings at the parent company level and (ii) we present taxable income in certain periods at the parent company level.
<i>Temporary differences – foreign exchange differences</i>	We usually opt for taxation of foreign exchange differences on a cash basis. As a result, taxes are due and expenses are deductible when we settle the underlying asset or liability.
<i>Temporary differences – losses on Usiminas shares</i>	While we recognize changes in investments in Usiminas' shares on an accrual basis, only upon divestment will we generate a taxable or deductible event.
<i>Temporary differences – other provisions</i>	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 and environmental liabilities.

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We prepared this study based on our long-term business plan, which covers a period for which our management can reasonably make estimates, and 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).

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

We have had income tax losses in most of the last five years, mainly due to volatility in the Brazilian political and macroeconomic environment and 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;
- 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 has improved profitability and considers that gradual recognition of tax credits, using an initial projection period of less than ten years, better reflects the expectation of utilization of the credits recognized in our tax books.

We understand this is a critical accounting policy because it considers several operating assumptions that require judgment and are subject to a volatile macroeconomic environment.

See further details in note 18.b. to our audited consolidated financial statements included elsewhere in this annual report.

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 party to 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 8. Financial Information—8A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings.”

We understand this is a critical accounting policy due to the structure of the Brazilian legal system and the uncertainties relating to amounts involved in legal and administrative proceedings.

[Table of Contents](#)*Mineral Reserves and Useful Life of Mines*

We periodically evaluate and update our estimates of probable and proven reserves. We determine these reserves using generally accepted geological valuation techniques. The method of calculation requires the use of different assumptions by internal specialists and changes in some of these assumptions may have a significant impact on probable and proven iron ore reserves recorded and on the useful life of mines.

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

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

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

We capitalize the development costs of new mineral deposits or capacity expansion in mine operations and amortize using the produced (extracted) units method based on the probable and proven ore quantities. The development stage includes:

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

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

We include stripping costs in the production phase in the cost of inventory, except when we undergo a specific extraction campaign to access deposits deeper than 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.

We understand this is a critical accounting policy due to the level of uncertainty in the determination of mineral reserves and the useful life of mines, as well as the significant impact that changes to the reserve volume of mines and, consequently, the useful life of mines may have on our depreciation costs and the evaluation of our impairment of tangible and intangible assets.

Property, Plant and Equipment

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

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

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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 12 to our audited consolidated financial statements included elsewhere in this annual report.

We understand this is a critical accounting policy due to the subjective criteria employed in the determination of the remaining useful life of assets and the amounts involved in our property, plant and equipment.

As of December 31, 2019, 2020 and 2021, we capitalized borrowing costs of R\$117.2 million, R\$92.5 million and R\$87.4 million, respectively. These costs are estimated for our mining projects related mainly to the Casa de Pedra expansion and TECAR.

Leases

According to IFRS 16 – *Leases*, we determine, in initial recognition, the lease term or non-cancellable term which will be used in the measurement of the right-of-use and lease liabilities. We reassess the lease term when a material event or material change occurs in circumstances that are in our control as lessee and affect the non-cancellable term. As provided in IFRS 16, we adopt the exemption from recognition for lease agreements with a term of less than 12 months, or which underlying asset is of immaterial value.

At the initial date of the lease, we recognize the right to use the asset and the lease liability at present value. According to IFRS 16, we measure the asset right-of-use at cost, which includes the lease liability, initial costs, advance payments and estimated costs to dismantle, remove or restore. We measure the lease liability at the initial date of the lease considering the present value of the lease payments that are set on that date. We discount lease payments at the interest rate in the lease, or if the interest rate cannot be determined, an incremental borrowing rate, that is the rate of interest that a lessee would have to pay to borrow the funds necessary to obtain a right to use an asset of similar value, as provided under IFRS 16.

In lease agreements for which we set the interest rate, this interest rate is considered implied in the agreements' terms and is applied to discount the flow of future lease payments. In lease agreements with no defined interest rate, we apply the incremental borrowing rate, which we calculate based on consultations with banks that we have a relationship with and adjust it for expected inflation.

We understand this is a critical accounting policy due to the need to continuously monitor our agreements to determine whether new agreements are considered leases and to remeasure existing agreements. In addition, the interpretation of certain policies, such as the payment of fixed compensation, is a major factor in the application of IFRS 16.

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, 2021 are described in note 2.e to our audited consolidated financial statements included elsewhere in this annual report.

Results of Operations

The following table presents certain financial information with respect to our results of operations for each of the years ended December 31, 2019, 2020 and 2021:

	Year ended December 31,			
	2019	2020	2021	2021 ⁽¹⁾
	<i>(in millions of R\$, except per share data)</i>			<i>(in millions of US\$, except per share data)</i>
Net operating revenues	25,436	30,064	47,912	8,586
Cost of products sold	(17,263)	(19,125)	(23,837)	(4,630)
Gross profit	8,173	10,939	22,075	3,956
Operating expenses				
Selling	(2,343)	(2,004)	(2,372)	(425)
General and administrative	(511)	(505)	(588)	(105)
Equity in results of affiliated companies	126	72	183	33
Other expenses	(2,407)	(3,270)	(1,716)	(308)
Other income	504	482	2,958	530
Total	(4,631)	(5,225)	(1,535)	(275)
Operating income	3,542	5,714	20,540	3,681

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Non-operating income (expenses), net				
Financial income	379	1,803	1,167	209
Financial expenses	(2,510)	(2,599)	(3,111)	(558)
(Loss) income before taxes	1,411	4,918	18,596	3,332
Income tax				
Current	(1,564)	(2,052)	(4,241)	(760)
Deferred	2,398	1,427	(759)	(136)
Net income (loss) for the period	2,245	4,293	13,596	2,436
Net income (loss) attributable to noncontrolling interest	455	498	1,337	240
Net income (loss) attributable to CSN	1,789	3,794	12,259	2,197
Basic earnings per common share	1.29632	2.74926	8.90654	1.59601
Diluted earnings per common share	1.29632	2.74926	8.90654	1.59601

(1) Translated solely for the convenience of the reader at the rate of R\$5.581 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2021, as reported by the Central Bank.

Year 2021 Compared to Year 2020

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 entity, MRS, reflected in the figures presented below.

Our consolidated results for the years ended December 31, 2020 and 2021 by business segment are presented below:

	Year ended December 31, 2020							Consolidated
	Steel	Mining	Port	Railway ⁽¹⁾	Energy	Cement	Corporate Expenses/ Elimination	
	<i>(in millions of R\$)</i>							
Net revenue								
Domestic market	11,721	1,533	256	1,490	173	857	(3,144)	12,886
Foreign market	4,882	11,151	-	-	-	1	1,145	17,178
Total net revenue	16,603	12,683	256	1,490	173	858	(1,999)	30,064
Cost of sales and services	(14,171)	(5,532)	(188)	(1,094)	(128)	(647)	2,635	(19,125)
Gross profit	2,432	7,151	69	396	45	211	636	10,939
General and administrative expenses	(923)	(180)	(22)	(115)	(30)	(88)	(1,151)	(2,509)
Other operating (income) expenses, net	(392)	(666)	(5)	53	(3)	(45)	(1,729)	(2,788)
Equity in results of affiliated companies	-	-	-	-	-	-	72	72
Operating result before financial income and taxes	1,117	6,305	42	334	12	78	(2,172)	5,714

(1) Railway logistics in our segment break-down includes our investee MRS, which is not consolidated in our audited consolidated financial statements and is reflected only in equity in results of affiliated companies.

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	Year ended December 31, 2021							Consolidated
	(in millions of R\$)							
	Steel	Mining	Port	Railway ⁽¹⁾	Energy	Cement	Corporate Expenses/ Elimination	
Net revenue								
Domestic market	21,400	3,114	311	1,839	223	1,430	(5,084)	23,234
Foreign market	8,691	14,929	-	-	-	-	1,058	24,678
Total net revenue	30,091	18,043	311	1,839	223	1,430	(4,026)	47,912
Cost of sales and services	(20,081)	(7,706)	(220)	(1,266)	(146)	(893)	4,475	(25,837)
Gross profit	10,010	10,338	91	573	76	537	449	22,074
General and administrative expenses	(1,159)	(351)	(34)	(135)	(32)	(191)	(1,057)	(2,959)
Other operating (income) expenses, net	(405)	(288)	(8)	58	41	(64)	1,907	1,242
Equity in results of affiliated companies	-	-	-	-	-	-	183	183
Operating result before financial income and taxes	8,446	9,699	49	496	85	282	1,482	20,540

(1) Railway logistics in our segment break-down includes our investee MRS, which is not consolidated in our audited consolidated financial statements and is reflected only in equity in results of affiliated companies.

Net Operating Revenues

Net operating revenues increased R\$17,848 million, or 59.4%, from R\$30,064 million in 2020 to R\$47,912 million in 2021, due to an increase in sales volume and in prices, as well as the depreciation of the *real* against the U.S. dollar.

Net domestic operating revenues increased R\$10,458 million, or 81.3%, from 12,866 million in 2020 to R\$23,324 in 2021, due to an increase in sales volume and in prices volumes in our steel, mining and cement segments.

Net revenues of exports and sales abroad increased R\$7,500 million, or 43.7%, from \$17,178 million in 2020 to 24,678 in 2021, due to higher iron ore and steel prices, an increase in sales volume and the depreciation of the *real* against the U.S. dollar.

Steel

Steel net operating revenues increased R\$13,488 million, or 81.2%, from R\$16,603 million in 2020 to R\$30,091 million in 2021. Sales volume decreased 1.0%, from 4.6 million tons in 2020 to 4,603 million tons in 2021, while realized steel prices increased 84%. Steel net domestic operating revenues increased R\$9,679 million, or 82.6%, from R\$11,721 million in 2020 to R\$21,400 million in 2021. Steel net revenues of exports and sales abroad increased R\$3,809 million, or 78.0%, from R\$4,882 million in 2020 to R\$8,691 million in 2021.

Mining

Mining net operating revenues increased R\$5,360 million, or 42.3%, from R\$12,683 million in 2020 to R\$18,043 million in 2021, due to an increase in iron ore prices in the first half of 2021, the depreciation of the *real* against the U.S. dollar and an increase of 7% in sales volume, from 31.2 million tons in 2020 to 33.2 million tons in 2021. In 2021, iron ore production reached 36.2 million tons, which represented a 18% increase over the same period in 2020.

Logistics

In 2020, net operating revenues from railway logistics were R\$1,490 million and net operating revenues from port logistics were R\$256 million, while in 2021, net operating revenues from railway logistics were R\$1,839 million and net operating revenues from port logistics were R\$311 million. In 2021, port logistics handled 793,000 tons of steel products, 22,000 tons of general cargo, 120,000 containers and 1,472,000 tons of bulk, at a 38.3% average price increase in containers as compared to the same period in 2020.

Energy

Our net operating revenues from the energy segment increased R\$50 million, or 28.9%, from R\$173 million in 2020 to R\$223 million in 2021, mainly due to an increase in the volume of traded energy and higher energy prices.

[Table of Contents](#)[Cement](#)

Our net operating revenues from the cement segment increased R\$572 million, or 67%, from R\$858 million in 2020 to R\$1,430 million in 2021, mainly due to a 18% increase in volume sold, in large part as a result of our consolidation of Elizabeth Cimentos S.A.'s operations.

[Cost of Products Sold](#)

Cost of products sold increased R\$6,712 million, or 35.1%, from R\$19,125 million in 2020 to R\$25,837 million in 2021, mainly due to operating costs in our steel and mining segments, as well as the effects of the depreciation of the *real* against the U.S. dollar on our cost of purchases of certain raw materials, such as coal, coke and iron ore, from third parties.

[Steel](#)

Steel costs of products sold increased R\$5,910 million, or 41.7%, from R\$14,171 million in 2020 to R\$20,081 million in 2021, mainly due to an increase in the volume of purchased raw materials, principally iron ore and coke, and the effects of the depreciation of the *real* against the U.S. dollar on the cost of these purchases.

The following table sets forth a breakdown of our steel production costs in the periods presented. Except for coal and coke, which we import, and certain metals (such as aluminum, zinc and tin) with domestic prices linked to international prices, our production costs are mostly denominated in *reais*.

	2020		2021		Variation 2021 v. 2020	
	millions of R\$	R\$/ton	millions of R\$	R\$/ton	millions of R\$	R\$/ton
Raw materials	6,309	1,700	12,982	3,080	6,672	1,282
Iron ore	1,430	385	2,939	697	1,509	290
Coal	974	263	1,279	303	305	26
Coke	1,566	422	3,518	835	1,952	389
Coils	3	1	0	0	(3)	(1)
Metals	637	171	891	211	254	30
Outsourced slabs	154	41	956	227	803	183
Pellets	1,077	290	2,461	584	1,384	277
Scrap	141	38	219	52	78	12
Other	327	88	718	170	391	77
Labor	930	251	943	223.7	13	(41)
Other production costs	2,731	736	3,853	914.2	1,122	136
Energy / fuel	964	260	1,364	324	400	49
Services and maintenance	396	107	813	193	417	80
Tools and supplies	396	107	500	119	104	6
Depreciation	637	172	774	184	137	2
Other	337	91	402	95	65	(1)
Total	9,971	2,686	17,778	4,217.8	7,807	1,377

[Mining](#)

Our mining costs of products sold increased R\$2,174 million, or 39.3%, from R\$5,532 million in 2020 to R\$7,706 million in 2021, mainly due to an increase in iron ore prices, which increased the cost of iron ore purchased from third parties and other costs indexed to these prices, as well as an increase in average freight rates deriving from global logistics challenges in 2021, as well as the depreciation of the *real* against the U.S. dollar.

[Logistics](#)

Cost of services attributable to our logistics segment increased R\$204, or 15.9%, from R\$1,282 million in

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2020 to R\$1,486 million in 2021, mainly due to an increase in shipment volume and adjustments in fuel prices.

Energy

Cost of products sold attributable to our energy segment increased R\$18 million, or 14.1%, from R\$128 million in 2020 to R\$146 million in 2021, due to an increase in sales volume.

Cement

Cost of products sold attributable to our cement segment increased R\$246 million, or 38.0%, from R\$647 million in 2020 to R\$893 million in 2021, mainly due to a 18% increase in sales volume and an increase in raw material costs.

Gross Profit

Gross profit increased R\$11,135 million, or 101.8%, from R\$10,939 million in 2020 to R\$22,074 million in 2021, due to an increase in our operating revenues higher than the increase in our cost of products sold, as discussed above.

Steel

Gross profit in the steel segment increased R\$7,578 million, or 311.6%, from R\$2,432 million in 2020 to R\$10,010 million in 2021, due to the reasons discussed above.

Mining

Gross profit in the mining segment increased R\$3,187 million, or 44.6%, from R\$7,151 million in 2020 to R\$10,338 million in 2021, due to the reasons discussed above.

Logistics

Gross profit in the logistics segment increased R\$199 million, or 42.8%, from R\$465 million in 2020 to R\$664 million in 2021, due to the reasons discussed above.

Energy

Gross profit in the energy segment increased R\$31 million, or 68.9%, from R\$45 million in 2020 to R\$76 million in 2021, due to the reasons discussed above.

Cement

Gross profit in the cement segment increased R\$326 million, or 154.5%, from R\$211 million in 2020 to R\$537 million in 2021, due to the reasons discussed above.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased R\$450 million, or 17.9%, from R\$2,509 million in 2020 to R\$2,959 million in 2021. Selling expenses increased R\$367 million, or 18.3%, from R\$2,004 million in 2020 to R\$2,372 million in 2021, mainly due to an increase in average freight rates. General and administrative expenses increased R\$82.7 million, or 16.4%, from R\$505 million in 2020 to R\$587 million in 2021, due to ordinary course increases in our expenses.

Other Operating Income (Expenses)

Other operating income (expenses) varied R\$4,029 million, from a net operating expense of R\$2,788 million in 2020 to a net operating income of R\$1,242 million in 2021.

Other operating income increased R\$2,476 million, or 513.1%, from R\$482 million in 2020 to R\$2,958 million in 2021, mainly due to R\$2,473 million in proceeds in 2021 from our sale of part of our equity interest in CSN Mineração in the context of its initial public offering.

Other operating expenses decreased R\$1,554 million, or 47.5%, from R\$3,270 million in 2020 to R\$1,716 million in 2021, mainly due to R\$266 million in idle capacity in our mining segment and R\$1,398 million in realization of hedge accounting, in each case in 2020.

[Table of Contents](#)Equity in Results of Affiliated Companies

Equity in results of affiliated companies varied R\$110 million, or 152.8%, from a gain of R\$72 million in 2020 to a gain of R\$182 million in 2021, mainly due to an increase in the net income of our investee MRS.

Operating Income

Operating income increased R\$14,826 million, or 259.5%, from R\$5,714 million in 2020 to R\$20,540 million in 2021, due to the reasons discussed above.

Financial Income (Expenses), Net

Net financial expenses increased R\$1,148 million, or 144.2%, from R\$796 million in 2020 to R\$1,944 million in 2021, mainly due to increases of R\$347 million in expenses from foreign exchange results, R\$92 million in interest on borrowings and R\$126 million in the fair value of trade payables, as well as a decrease of R\$805 million in gains on our shares in Usiminas, which effects were partially offset by an increase of R\$221 million in financial investments and a decrease of R\$115 million in losses on exchange derivatives.

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 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 is volatile among fiscal periods.

At statutory rates, we had an income tax and social contribution credit of R\$1,672 million in 2020 and an expense for income tax and social contribution of R\$6,323 million in 2021, which represents 34% of our income before taxes. After adjustments to meet the effective income tax rates, we recorded an expense for income tax and social contribution of R\$626 million in 2020 and a tax expense of R\$5,000 million in 2021. Expressed as a percentage of pretax income, our effective income tax rate was positive at 13% in 2020 and 27% in 2021. In the 2021, in order to meet the effective income tax rate, we had a positive net adjustment of R\$1,322 million, mainly due to a positive impact of R\$1,034 million related to deferred income tax credits recognized in 2021, which effect was partially offset by R\$438 million in tax on the results of subsidiaries at different rates or not taxed.

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.

For further information, see note 18.a. to our audited consolidated financial statements included elsewhere in this annual report.

Net Income for the Year

In 2020, we recorded net income of R\$4,293 million, as compared to R\$2,245 million in 2019. The increase of R\$2,048 million, or 91.2%, was due to the reasons discussed above.

In 2021, we recorded net income of R\$13,595 million, as compared to net income of R\$4,293 million in 2020. The increase of R\$9,303 million, or 216.7%, was due to the reasons discussed above.

Year 2020 Compared to Year 2019

Our consolidated results for the years ended December 31, 2019 and 2020 by business segment are presented below:

Consolidated Results	Year ended December 31, 2019							Consolidated
	Steel	Mining	Port	Railway ⁽¹⁾	Energy	Cement	Corporate Expenses/ Elimination	
Net revenue								
Domestic market	10,028	927	240	1,321	325	571	(2,462)	10,950
Foreign market	3,921	9,101	-	-	-	-	1,464	14,486
Total net revenue	13,949	10,028	240	1,321	325	571	(998)	25,436
Cost of sales and services	(12,963)	(4,396)	(173)	(1,030)	(267)	(608)	2,174	(17,263)

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Gross profit	986	5,631	67	291	59	(37)	1,176	8,173
General and administrative expenses	(835)	(186)	(35)	(110)	(29)	(91)	(1,568)	(2,854)
Other operating (income) expenses, net	(1,055)	(218)	(4)	147	(1)	(41)	(371)	(1,903)
Equity in results of affiliated companies	-	-	-	-	-	-	126	126
Operating result before financial income and taxes	(904)	5,227	29	329	28	(169)	(998)	3,542

Year ended December 31, 2020

(in millions of R\$)

Consolidated Results	Steel	Mining	Port	Railway ⁽¹⁾	Energy	Cement	Corporate Expenses/ Elimination	Consolidated
Net revenue								
Domestic market	11,721	1,533	256	1,490	173	857	(3,144)	12,886
Foreign market	4,882	11,151	-	-	-	1	1,145	17,178
Total net revenue	16,603	12,683	256	1,490	173	858	(1,999)	30,064
Cost of sales and services	(14,171)	(5,532)	(188)	(1,094)	(128)	(647)	2,635	(19,125)
Gross profit	2,432	7,151	69	396	45	211	636	10,939
General and administrative expenses	(923)	(180)	(22)	(115)	(30)	(88)	(1,151)	(2,509)
Other operating (income) expenses, net	(392)	(666)	(5)	53	(3)	(45)	(1,729)	(2,788)
Equity in results of affiliated companies	-	-	-	-	-	-	72	72
Operating result before financial income and taxes	1,117	6,305	42	334	12	78	(2,172)	5,714

(1) Railway logistics in our segment break-down includes our investee MRS, which is not consolidated in our audited consolidated financial statements and is reflected only in equity in results of affiliated companies.

Net Operating Revenues

Net operating revenues increased R\$4,628 million, or 18.2%, from R\$25,436 million in 2019 to R\$30,064 million in 2020, due to an increase in sales volume and in prices.

Net domestic operating revenues increased R\$1,936 million or 17.7%, from R\$10,951 million in 2019 to R\$12,886 million in 2020, and net operating revenues of exports and sales abroad increased 18.6%, from R\$14,486 million in 2019 to R\$17,178 million in 2020, in each case mainly due to increases in steel and realized iron ore prices.

Steel

Steel net operating revenues increased R\$2,654 million, or 19.0%, from R\$13,949 million in 2019 to R\$16,603 million in 2020, and sales volume increased 2.8%, from 4.5 million tons in 2019 to 4.6 million tons in 2020, mainly due to an increase in average steel prices, including, in the case of exports and of direct sales of our foreign subsidiaries, which are denominated in U.S. dollars, as a result of the depreciation of the real against the U.S. dollar.

Mining

Mining net operating revenues increased R\$2,655 million, or 26.5%, from R\$10,028 million in 2019 to R\$12,683 million in 2020, due to an increase in iron ore prices and the depreciation of the real against the U.S. dollar, which effect was partially offset by a decrease of 19.2% in sales volume, from 38.5 million tons in 2019 to 31.2 million tons in 2020.

Logistics

In 2020, net operating revenues from railway logistics were R\$1,490 million and net operating revenues from port logistics were R\$256 million, as compared to net operating revenues from railway logistics of R\$1,321 million and net operating revenues from port logistics of R\$240 million in 2019. In 2020, TECON

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moved 154,000 containers, 457,000 tons of steel products, 122,000 tons of general cargo and 1,435,000 tons of solid bulk, as compared to 161,000 containers, 423,000 tons of steel products, 205,000 tons of general cargo and 626,000 tons of solid bulk, as well as 1,700 vehicles, in 2019.

Energy

Our net operating revenues from the energy segment decreased R\$152 million, or 46.8%, from R\$325 million in 2019 to R\$173 million in 2020, mainly due to a decrease in energy available for sale as a result of an increase in our proprietary consumption and a decrease in market prices.

Cement

Our net operating revenues from the cement segment increased R\$287 million, or 50.3%, from R\$571 million in 2019 to R\$858 million in 2020, mainly due to higher prices and a 12.7% increase in sales volume.

Cost of Products Sold

Consolidated cost of products sold increased R\$1,862 million, or 10.8%, from R\$17,263 million in 2019 to R\$19,125 million in 2020, mainly due to operating costs on blast furnace no. 3 at Volta Redonda in our steel segment and the effects of the depreciation of the *real* against the U.S. dollar on the cost of purchases of iron ore from third parties in our mining segment, which effects were partially offset by an increase in eliminations of related party transactions between our consolidated entities, principally as a result of exchange rate variations on transactions with CSN Mineração.

Steel

Costs of products sold attributable to our steel segment increased R\$1,208 million, or 9.3%, from R\$12,963 million in 2019 to R\$14,171 million in 2020, mainly due to our recording operating costs of blast furnace no. 3 at Volta Redonda as idle capacity under other expenses during its refurbishment in 2019.

The following table sets forth a breakdown of our steel production costs in the periods presented. Except for coal and coke, which we import, and certain metals (such as aluminum, zinc and tin) with domestic prices linked to international prices, our production costs are mostly denominated in *reais*.

	2019		2020		Variation 2020 v. 2019	
	millions of R\$	R\$/ton	millions of R\$	R\$/ton	millions of R\$	R\$/ton
Raw materials	6,664	1,795	6,309	1,700	(354)	(95.5)
Iron ore	834	225	1,430	385	596	160.5
Coal	1,226	330	974	263	(251)	(67.7)
Coke	1,168	315	1,566	422	398	107.1
Coils	557	150	3	1	(554)	(149.3)
Metals	583	157	637	171	54	14.5
Outsourced slabs	1,253	338	154	41	(1,099)	(296.1)
Pellets	558	150	1,077	290	518	139.7
Scrap	178	48	141	38	(37)	(9.9)
Other	306	83	327	88	21	5.7
Labor	990	267	930	251	(60)	(16.1)
Other production costs	2,623	707	2,731	736	108	29.1
Energy / fuel	1,114	300	964	260	(150)	(40.5)
Services and maintenance	423	114	396	107	(27)	(7.3)
Tools and supplies	364	98	396	107	32	8.5
Depreciation	443	119	637	172	194	52.3
Other	277	75	337	91	60	16.1
Total	10,277	2,769	9,971	2,686	(306)	(82.4)

[Table of Contents](#)Mining

Costs of products sold attributable to our mining segment increased R\$1,136 million, or 25.9%, from R\$4,396 million in 2019 to R\$5,532 million in 2020, mainly due to the depreciation of the *real* against the U.S. dollar, which effect increased the cost of our purchases of iron ore from third parties.

Logistics

Cost of services attributable to our logistics segment increased R\$78 million, or 6.5%, from R\$1,204 million in 2019 to R\$1,282 million in 2020, mainly due to adjustments in fuel prices.

Energy

Cost of products sold attributable to our energy segment decreased R\$139 million, or 52.1%, from R\$267 million in 2019 to R\$128 million in 2020, mainly due to a decrease in energy available for sale as a result of an increase in our proprietary consumption.

Cement

Cost of products sold attributable to our cement segment increased R\$39 million, or 6.4%, from R\$608 million in 2019 to R\$647 million in 2020, mainly due to an increase in sales volume.

Gross Profit

Gross profit increased R\$2,766 million, or 33.8%, from R\$8,173 million in 2019 to R\$10,939 million in 2020, due to an increase of R\$4,628 million in net operating revenues, which was partially offset by an increase of R\$1,862 million in cost of products sold, as discussed above.

Steel

Gross profit in the steel segment increased R\$1,446 million, or 146.7%, from R\$986 million in 2019 to R\$2,432 million in 2020, due to the reasons discussed above.

Mining

Gross profit in the mining segment increased R\$1,520 million, or 27.0%, from R\$5,631 million in 2019 to R\$7,151 million in 2020, due to the reasons discussed above.

Logistics

Gross profit in the logistics segment increased R\$107 million, or 29.9%, from R\$358 million in 2019 to R\$465 million in 2020, due to the reasons discussed above.

Energy

Gross profit in the energy segment decreased R\$14 million, or 23.7%, from R\$59 million in 2019 to R\$45 million in 2020, due to the reasons discussed above.

Cement

Gross profit (loss) in the cement segment increased R\$248 million, or 670.3%, from gross loss of R\$37 million in 2019 to gross profit of R\$211 million in 2020, due to the reasons discussed above.

Selling, General and Administrative Expenses

Selling, general and administrative expenses decreased R\$345 million, or 12.1%, from R\$2,854 million in 2019 to R\$2,509 million in 2020. Selling expenses decreased R\$339 million, or 14.5%, from R\$2,343 million in 2019 to R\$2,004 million in 2020, mainly due to a decrease in average freight rates. General and administrative expenses decreased R\$6 million, or 1.2%, from R\$511 million in 2019 to R\$505 million in 2020.

Other Operating Income (Expenses)

Net other operating expenses increased R\$885 million, or 46.5%, from R\$1,903 million in 2019 to R\$2,788 million in 2020. Other operating expenses increased R\$863 million, or 35.8%, from R\$2,407 million in 2019 to R\$3,270 million in 2020, mainly due to an increase of R\$1,161 million in realization of our cash flow hedge

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accounting. These effects were partially offset by a decrease of R\$243 million in idle capacity, resulting from R\$547 million in maintenance of blast furnace no. 3 at Volta Redonda in 2019, as compared to R\$304 million in delays in the initiation of operations in new mining fronts in 2020 and ramp-up of new dry tailings processes in the first quarter of 2020. In addition, other operating income decreased R\$22 million, from R\$504 million in 2019 to R\$482 million in 2020, resulting from our recognition of R\$147 million in indemnities receivable in 2020 relating to recurring failures in the supply of energy, as compared to our recognition of R\$131 million in receivables in 2019 pursuant to contractual agreements.

Equity in Results of Affiliated Companies

Equity in results of affiliated companies decreased R\$54 million, or 42.9%, from R\$126 million in 2019 to R\$72 million in 2020, mainly due to a decrease in the net income of our investees TLISA and MRS.

Operating Income

Operating income increased R\$2,172 million, or 61.3%, from R\$3,542 million in 2019 to R\$5,714 million in 2020, due to the reasons discussed above.

Financial Income (Expenses), Net

Net financial expenses decreased R\$1,335 million, or 62.6%, from R\$2,131 million in 2019 to R\$796 million in 2020, mainly due to R\$1,190 million in gains on our shares in Usiminas, which we recorded as other operating income (expense) in 2019.

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 in this annual report 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 is volatile among fiscal years.

At statutory rates, we had a tax expense of R\$1,672 million in 2020 and R\$480 million in 2019, which, in each case, represents 34% of our income before taxes. After adjustments to meet the effective income tax rates, we recorded an income tax and social contribution expense of R\$626 million in 2020, as compared to a benefit of R\$834 million in 2019. Expressed as a percentage of pre-tax income, our effective income tax rate was 13% in 2020 and (59)% in 2019. In 2020, in order to meet the effective income tax rate, we had a positive net adjustment of R\$1,047 million, mainly due to a positive impact of R\$1,540 million related to deferred income tax credits recognized in 2020, which effect was partially offset by R\$520 million in tax on the results of subsidiaries at different rates or not taxed.

For further information, see note 18.a. to our audited consolidated financial statements included elsewhere in this annual report.

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 local subsidiaries, as well tax losses from offshore operations.

Net Income for the Year

In 2020, we recorded net income of R\$4,293 million, as compared to R\$2,245 million in 2019. The increase of R\$2,048 million, or 91.2%, was due to the reasons discussed above.

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 2021, we met our cash needs primarily through a combination of operating cash flow, cash and cash equivalents on hand and newly issued long-term debt instruments in order to repay the portion of our total debt maturing in 2021.

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

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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 increased to R\$7,702 million as of December 31, 2021, as compared to cash and cash equivalents of R\$8,856 million as of December 31, 2020.

Operating Activities

Cash provided by operating activities increased R\$5,216 million, or 54.5%, from R\$9,577 million in 2020 to R\$14,793 million in 2021, mainly due to the R\$9,303 million increase in our net income, adjusted by R\$376 million in certain reconciling items that do not represent cash receipts or disbursements, such as the positive change of R\$930 million in the fair value of our Usiminas shares, our gain of R\$2,473 million on our sale of part of our equity interest in CSN Mineração in the context of its initial public offering, reflected in our net income that did not affect our cash provided by operating activities, as well as depreciation and amortization expenses, deferred income taxes, foreign exchange variations and minor other changes that, in the aggregate, amount to R\$3,026 million. Additionally, we had net changes in certain operating assets and liabilities, including a decrease of R\$7,108 million in inventories, a decrease of R\$931 million in taxes recoverable, a decrease of R\$216 million in interest payments, a decrease of R\$433 million in taxes payable and a decrease of R\$687 million in advance of customers, which effects were partially offset by increases of R\$3,383 million in suppliers, R\$1,756 million in trade receivables and R\$116 million in dividends, as well as a decrease of R\$287 million as settlement of our PLATTS index hedge.

Investing Activities

Cash provided by investing activities was R\$448 million in 2021 and cash used in investing activities was R\$1,864 million in 2020. The increase of R\$2,312 million in cash provided by investing activities was mainly due to (i) R\$3,165 million in gains on our sale of part of our equity interest in CSN Mineração in the context of its initial public offering and (ii) R\$1,303 million in gains on our sale of a portion of our Usiminas shares, which effects were partially offset by an increase of R\$1,181 million in acquisition of property, plant and equipment, a payment of R\$727.7 million to acquire Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda. and a payment of R\$263.7 million as deposit in guarantee for the acquisition of LafargeHolcim (Brasil) S.A. For more information on these acquisitions, see "Item 4. Information on the Company—A. History and Development of the Company—Our Strategies—Cement."

Financing Activities

Cash used by financing activities was R\$8,530 million in 2021 and cash provided by financing activities was R\$1,185 million in 2020. This increase of R\$9,715 million in cash used by financing activities was mainly due to (i) an increase of R\$11,191 million in debt amortization payments as compared to 2020, (ii) an increase of R\$2,981 million in payments of dividends and interest on shareholders' equity as compared to 2020 and (iii) R\$1,516 million used to repurchase certain outstanding CSN and CSN Mineração shares in 2021. These effects were partially offset by R\$1,347.9 million in cash provided by the primary issuance of CSN Mineração's shares in the context of its initial public offering and an increase of R\$4,760 million in new borrowings, financing and debentures.

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, was 25 days, 23 days and 20 days as of December 31, 2019, 2020 and 2021.

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 92 days, 64 days and 140 days as of December 31, 2019, 2020 and 2021, respectively.

[Table of Contents](#)*Trade Accounts Payable Turnover Ratio*

Our trade accounts payable turnover ratio, which we measure by dividing our trade accounts payable by our cost of products sold, measured in days of cost of products sold, was 84 days, 94 days and 134 days as of December 31, 2019, 2020 and 2021, 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 cash on hand to run our operations and to meet our short-term financial obligations. As of December 31, 2021, cash and cash equivalents were R\$16,646 million, as compared to R\$9,945 million as of December 31, 2020 and R\$1,089 million as of December 31, 2019.

As of December 31, 2021, our short-term and long-term indebtedness accounted for 17% and 83%, respectively, of our total debt, and the average life of our existing debt was equivalent to approximately 42 months.

Capital Expenditures and Investments

In 2021, we had capital expenditures and investments of R\$2,934 million, mainly as follows:

- R\$1,189 million in our steel segment: productivity and modernization projects to improve performance, coke battery revamp, automation and efficiency improvements, sustainability enhancements, maintenance and spare parts in all our steel facilities.
- R\$1,436 million in our mining segment: projects in iron ore beneficiation to increase iron recovery, quality, reduce reliance on dams and turn part of waste into product; renewal of mine equipment fleet, maintenance and safety measures on our tailings dams; sustainability, maintenance and spare parts in all our mining facilities and ports.
- R\$195 million in our cement segment: sustaining projects in our Volta Redonda, Arcos and Alhandra plants.

Debt and Derivative Instruments

As of December 31, 2020 and 2021, our total debt (composed of current and non-current portions of borrowings and financings) was R\$35,270.7 million and R\$32,508 million (including transactions costs), respectively, which represents and 313.5% and 139.1% of shareholders' equity as of December 31, 2020 and 2021, respectively. As of December 31, 2021, our short-term debt (comprising current borrowings and financings, which includes the current portion of long-term debt) was R\$5,487 million and our long-term debt (comprising non-current borrowings and financings) was R\$27,021 million.

As of December 31, 2021, approximately 32.5% 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:

	As of December 31, 2021	
	Current liabilities	Non-current liabilities
	<i>(in thousands of R\$)</i>	

Debt agreements in the international market**Variable interest:****US\$**

Prepayment

1,626,521

3,875,713

Fixed interest:**US\$**

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Bonds, perpetual bonds, facility, CCE and ACC	678,239	15,380,392
EUR		
Facility	550,460	79,013
	2,855,220	19,335,118
Debt agreements in Brazil		
Variable interest:		
R\$		
BNDES/FINAME, debentures, NCE and CCB	2,677,516	7,886,796
Total borrowings and financing	5,532,736	27,221,914
Transaction costs and issue premiums	(45,877)	(201,251)
Total borrowings and financing + transaction costs	5,486,859	27,020,663

For more information, see notes 13 and 14 to our audited consolidated financial statements included elsewhere in this annual report.

Debt Maturity Profile

In June 2021, we issued US\$850 million in aggregate principal amount of 4.625% notes due 2031, which proceeds we used to repurchase US\$925 million in aggregate principal amount of 7.625% notes due 2023 issued by our Luxembourg financing subsidiary, CSN Resources S.A., and guaranteed by us.

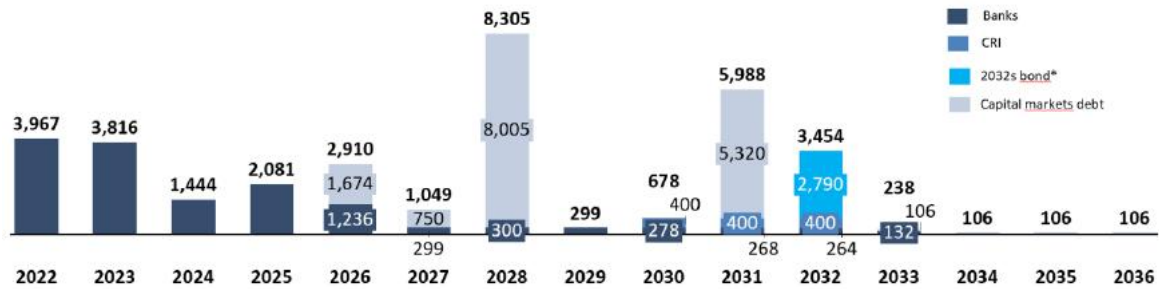
Also in June 2021, our subsidiary CSN Mineração contracted a US\$350 million syndicated loan, secured by the Japanese export credit agency Nippon Export and Investment Insurance – NEXI, with a 12-year maturity schedule and a two-year grace period during which we make no payment of principal. In addition, in August 2021, CSN Mineração S.A. issued R\$1.0 billion in aggregate principal amount of infrastructure debentures, with a 10- to 15-year maturity schedule, to support its investment in TECAR.

In July 2021, we announced a full redemption of US\$1.0 billion in aggregate principal amount of 7.00% perpetual notes, issued by our Cayman Islands finance subsidiary, CSN Islands XII Corp., and guaranteed by us, which redemption occurred in September 2021.

In November 2021, we issued R\$1.5 billion in aggregate principal amount of non-convertible debentures. The debentures have a seven-year term and accrue interest at a rate of 100% of the average daily interbank rate (*Depósito Interfinanceiro*) plus 1.65% per annum. We used the net proceeds from this issuance for working capital and general corporate purposes.

In December 2021, we extended the maturity of R\$1.2 billion in aggregate principal amount of financing with Banco do Brasil S.A., originally scheduled for between 2022 and 2023, to 2025 and 2026.

The following chart sets forth our debt maturity profile as of December 31, 2021 (amounts do not consider accrued interest, transaction costs or premiums on issuance):



* Issued in February 2022; see "Item 4. Information on the Company—4A. History and Development of the Company—Recent Developments—New Notes Issuance and Concurrent Tender Offer."

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The following table sets forth the maturity profile of our long-term debt as of December 31, 2021, gross of transaction costs and premiums on issuance:

Maturity	Principal Amount <i>(in thousands of RS)</i>
2022	5,532,736
2023	3,847,120
2024	1,446,710
2025	1,007,530
2026	4,589,861
After 2026	16,330,693
Total	32,754,650

We expect to fully pay, using cash flows from operating activities or new financings, or refinance the portions of our indebtedness due in 2022 to 2024.

For information on recent developments relating to our debt maturity profile, see “Item 4. Information on the Company—4A. History and Development of the Company—Recent Developments—New Notes Issuance and Concurrent Tender Offer.”

Contractual Obligations

The following table presents our long-term contractual obligations as of December 31, 2021:

Contractual Obligations	Payment due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	<i>(in millions of RS)</i>				
Long-term accrued finance charges ⁽¹⁾	8,891	2,010	3,124	1,393	2,364
Taxes payable in installments	204	52	91	46	15
Long-term debt ⁽²⁾	27,021	3,805	2,404	5,608	15,204
“Take-or-pay” contracts	9,142	2,022	4,016	1,824	1,280
Derivatives swap agreements ⁽³⁾	137	-	102	-	35
Leasing agreements ⁽⁴⁾	493	99	112	85	197
Purchase Obligations					
Raw materials ⁽⁵⁾	12,769	9,519	3,250	0	-
Maintenance ⁽⁶⁾	1,510	939	565	6	-
Utilities/fuel ⁽⁷⁾	2,661	2,405	160	65	31
Total	16,940	12,863	3,975	71	31

(1) These accrued finance charges refer to the cash outflow related to the contractual interest expense of our long-term debt and were calculated using the contractual interest rates taken forward to the maturity dates of each contract.

(2) These amounts were presented net of transaction costs and issue premiums.

(3) Derivative swap agreements were calculated based on market prices as of December 31, 2021.

(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.

Off-Balance Sheet Arrangements

In addition to the debt that is reflected on our balance sheet, we have the following guarantees of debt of other companies and “take-or-pay” contractual obligations:

[Table of Contents](#)*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 outstanding under the loans and debentures guaranteed by us as of December 31, 2021 was R\$2,952 million.

Under the TLSA Investment Agreement we and our partners, Valec and FDNE, agreed on a budget of R\$10.7 billion to complete the construction of the Northeastern Railway System II. 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.

“Take-or-Pay” Contractual Obligations

The following table sets forth our payment obligations under our “take-or-pay” agreements for the years presented:

Type of service	Payments in the period (in thousands of R\$)					Total
	2021	2022	2023	2024	After 2024	
Transportation of iron ore, coal, coke, steel products, cement and mining products	1,352	1,484	1,553	1,606	2,896	7,538
Supply of power, natural gas, oxygen, nitrogen, argon and iron ore pellets	1,546	1,508	389	370	2,039	4,307
Processing of slag generated during pig iron and steel production	74	47	42	6	-	95
Manufacturing, repair, recovery and production of ingot casting machine units	3	-	-	-	-	-
Oil storage and handling	2	3	3	1	-	6
Labor and consultancy services	33	36	36	36	167	274
	3,011	3,077	2,022	2,018	5,102	12,219

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

Following is a description of our take-or-pay contractual obligations under our outstanding agreements with MRS:

Transportation of Iron Ore, Coal and Coke to Volta Redonda

In 2021, the volume set for iron ore and pellets was 6.8 mkt and the volume set for coal, coke and other smelter products was 3.0 mkt, with a guarantee of payment of at least 85% of forecast annual revenue.

Transportation of Iron Ore for Export from Itaguai

In 2021, the volume set for iron ore was 38.8 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 2021, the volume set for steel products was 1.8 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 cement plant at Presidente Vargas to our terminals. In 2021, the volume set was 633.6 kt, with a guarantee of payment of at least 80%.

[Table of Contents](#)Ferrovía Centro Atlántica

Following is a description of our take-or-pay contractual obligations under our outstanding agreements with Ferrovía Centro Atlántica:

Transportation of Limestone

This agreement covers transportation of limestone from the city of Arcos to the city of Volta Redonda. In 2021, the volume set under this agreement was 1.8 mkt, with 100% of performance volume guaranteed.

Transportation of Clinker

This agreement covers transportation of clinker products from the city of Arcos to the city of Volta Redonda. In 2021, the volume set under this agreement was 660 kt, with 100% of performance volume guaranteed.

The calculation of “take-or-pay” contracts with Ferrovía Centro Atlántico considers the total volume performed in clinker and limestone contracts, regardless of the percentage transported of each.

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

We also consume significant amounts of oxygen, nitrogen, hydrogen, argon and other gases at the Presidente Vargas Steelworks. These gases are supplied by a third party under a long-term contract from its gas production facilities located on the Presidente Vargas Steelworks site. To secure gas supply (oxygen, nitrogen and argon), in 1994, we signed a 22-year “take-or-pay” agreement with White Martins under which we are committed to acquire at least 90% of the gas volume guaranteed in the contract. Under the terms of the agreement, we are not required to advance funds raised against future processing charges if White Martins is unable to meet its financial obligations. Although the original term of the agreement ended in November 2016; White Martins continues to supply gas while we negotiate a new agreement.

5C. Research and Development, Patents and Licenses, Etc.

We have more than 70 years of research, development and innovation experience and were the first Brazilian steelmaker to produce coated and pre-painted steels. Innovation is a fundamental part of our strategy as a pioneer in process, product and commercial solutions in the businesses in which we operate. We remain committed to quality and a continuous search for initiatives that deliver greater added value to our customers and stakeholders.

CSN Inova, created in 2018, is our innovation-focused subsidiary and we also have an active research and development center. CSN Inova is responsible for systematizing and leading the innovation process in an organized and broad manner in each of our business segments, including by hiring startups and connecting with universities and innovation hubs. Following are CSN Inova’s innovation pillars: (i) process optimization and operational efficiency; (ii) new revenue sources; and (iii) culture and sustainability. Together with each business area, CSN Inova implements projects that introduce new methodologies to solve our challenges and to support our digital transformation, make the most of our assets and seize new business opportunities.

CSN Inova has four areas with integrated innovation initiatives: (i) CSN Inova Open, which diagnoses our challenges and tests and scales technology-based solutions to address them; (ii) CSN Inova Ventures, which generates shared value with investments in startups; (iii) CSN Inova Bridge, which leads the integrated management of our ESG-focused innovation initiatives; and (iv) CSN Inova Tech, which conducts our path toward decarbonization, monitors technological trends, develops relationships with leading academic, science and technology centers, and implements innovative projects in our production processes.

In 2021, we conducted more than 50 diagnostic sessions in our steel, mining, cement and logistics businesses to identify challenges. CSN Inova Open mapped these challenges by process and indicator and measured economic and strategic potential in order to match each challenge with technological solutions for proof-of-concept tests and pilot projects, which we then follow with implementation at scale when applicable.

To ensure access to the best opportunities available for our businesses, CSN Inova has connected with more than 100 investment funds and startup accelerators in Brazil, Israel, United States, Singapore, China and England, among others, as well as leaders in innovation and venture capital.

Our research and development center located in Volta Redonda focuses on the development of new products to increase our competitiveness by diversifying our product mix and expanding our product portfolio, as well as on the implementation of new technologies in our production processes.

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Our research and development center comprises 15 laboratories that perform analyses related to the physical, chemical, mechanical and metallographic characteristics of our steel products and other alloys, with state-of-the-art equipment, including optical microscopy and scanning electron microscopy. Our research and development center also includes physical and computational simulation laboratories, which, among other things, allow us to evaluate the performance of our products in their various applications before we market them.

In 2021, one of the main projects of our research and development center was the development of high strength products for the automotive and auto parts market, as well as for the construction market. These products include advanced high strength steels – AHSS, which allow for complex geometries and high mechanical strength in vehicles. In addition, in the case of our hot-rolled steel products, our research and development center continued to focus on reduced cost opportunities and increased sustainability in their applications. Examples include the development of a family of high mechanical strength steel for application in structures for photovoltaic panels and the development of high strength steel for weight reduction of truck wheels. In the case of our cold-rolled flat steel products, we increased our offer of extra-fine products with bright surface characteristics. In the case of our pre-painted steel products, our research and development center sought diversification of applications, following market trends in aesthetics and durability. For aesthetics, we developed new products with beading paints and textured paints.

With our qualified technical staff and the use of application engineering technologies, we continuously seek excellence in testing and simulations of new materials. Our ongoing innovation and research and development activities allow us to be more responsive to the demands of the several industries in which our customers operate.

5D. Trend Information

Recent global developments relating to Russia's conflict with Ukraine have generated significant uncertainty in global trade and volatility in commodities markets. As of the date of this annual report, the only impacts on our operations that we have identified in 2022 have been an increase in certain raw materials prices and our search to substitute one coal supplier in Russia. Consequently, as of the date of this annual report, we have not identified risks to the continuity of our operations and have substantially maintained our operating assumptions unchanged. However, we cannot foresee the full extent of the potential impacts of this conflict or of related global developments that may significantly affect the industries in which we operate or our business. For more information, see "Item 3. Key Information—3D. Risk Factors—Risks Relating to Brazil—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 the ADSs," "Item 3. Key Information—3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—We are exposed to substantial changes in commodities prices, including oil prices, which significantly affect the prices of our inputs and the prices of our products, and may adversely affect us" and "—Measures adopted by, or conflicts between, foreign governments could adversely affect us."

5E. Critical Accounting Estimates

Not applicable.

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 (one of whom is the chairperson), 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 our board of executive officers are appointed by our 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 comprises one chairman and four members, and our board of executive officers comprises our chief executive officer and three executive officers.

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Our board of directors holds at least six ordinary meetings per year and extraordinary meetings whenever necessary.

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

Name	Position	Age ⁽¹⁾	First Elected on	Last Elected on
<i>Board of Directors</i>				
Benjamin Steinbruch	Chairman	68	April 23, 1993	April 30, 2021
Fabiam Franklin	Member	54	April 28, 2016	April 30, 2021
Yoshiaki Nakano	Member	77	April 29, 2004	April 30, 2021
Antonio Bernardo Vieira Maia	Member	62	April 30, 2013	April 30, 2021
Miguel Ethel Sobrinho	Member	75	April 26, 2019	April 30, 2021
<i>Board of Executive Officers</i>				
Benjamin Steinbruch	Chief Executive Officer	68	April 30, 2002	September 22, 2021
Marcelo Cunha Ribeiro	Chief Financial and Investor Relations Officer	44	September 29, 2017	September 22, 2021
David Moise Salama	Executive Officer	55	August 2, 2011	September 22, 2021
Luis Fernando Barbosa Martinez	Executive Officer	58	August 2, 2011	September 22, 2021
Eduardo Guardiano Leme Gotilla	Executive Officer	41	February 2, 2021	September 22, 2021
Milton Picinini Filho	Executive Officer	62	June 7, 2021	September 22, 2021
Stephan Heinz Josef Victor Weber	Executive Officer	60	June 7, 2021	September 22, 2021

(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 2023. The next election for our board of executive officers is expected to take place in September 2023.

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 the Company's Board of Directors since April 23, 1993, having held the position of Chairman of the Board of Directors since April 28, 1995. He has also held the position of Chief Executive Officer of the Company since April 30, 2002, being also responsible for the institutional area and mining and railway holdings. He is also Chairman of the Board of Directors of CSN Mineração S.A. and CSN Cimentos S.A. (companies controlled by CSN), Chairman of the Deliberative Council of Fundação CSN. Currently, he also holds the position of Chairman of the Board of Directors of the companies Textília S.A., Fibra Cia. Real Estate Credit Securitizer, Banco Fibra S.A., Elizabeth S.A. - Indústria Têxtil e Vicunha Steel S.A., as well as Vice-Chairman of the Board of Directors of Vicunha Aços S.A., member of the Board of Directors of Vicunha Participações S.A., Director of Rio Purus Participações S.A. and Rio Iaco Participações S.A., administrator of Fazenda Alvorada de Bragança Agro-Pastoril Ltda. (all these companies are part of CSN's controlling group). He is chairman of the Board of Directors of the Jockey Club of São Paulo and a member of the Board of Directors of the Portuguese Chamber. In the last 5 years, he was 1st Vice-President of the Federation of Industries of the State of São Paulo - FIESP, member of the Superior Strategic Council of FIESP, Director of the Roberto Simonsen Institute and Chairman of the Board of Directors of Nacional Minérios S.A. (merged into CSN Mineração S.A. in 2015), Transnordestina Logística S.A. and FTL - Ferrovia Transnordestina Logística S.A., and administrator of Haras Phillipson Ltda. (company extinguished in November 2017). He holds a degree in Business Administration from the School of Business Administration of Fundação Getúlio Vargas - SP, with a postgraduate degree in Marketing and Finance from Fundação Getúlio Vargas - SP.

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Fabiam Franklin. Mr. Franklin has been a member of the Company's Board of Directors since April 28, 2016. He has also been Chairman of the Advisory Board of CSN Invest Fundo de Investimento em Ações since April 4, 2016 and Metallurgy Director at the Company since May 2021. Previously, was General Manager of Production at the Company, having worked at the Reduction Metallurgy, Steel Metallurgy and Sheet Metal units. He also served as a member of the Board of Directors of ABM (Brazilian Association of Metallurgy, Materials and Mining) from 2015 to 2017, and coordinated the CSN Financial Education Program from 2008 to 2017. Graduated in Metallurgical Engineering from Universidade Federal Fluminense (UFF/RJ), with a specialization in Reduction Metallurgy from the MC Master University in Ontario, Canada and a postgraduate degree (MBA) in Business Management from Fundação Dom Cabral - Belo Horizonte/MG and a master's degree in Economics from IBMEC/RJ.

Yoshiaki Nakano. Mr. Nakano has been an independent member of the Company's Board of Directors since April 29, 2004, and a member of the Audit Committee since June 24, 2005, holding the position of Chairman of the Audit Committee since October 30, 2017. He also serves as a member of the Board of Directors of Transnordestina Logística S.A. (jointly controlled by CSN), independent member of the Board of Directors and member of the Audit Committee of CSN Mineração S.A., independent member of the Board of Directors of CSN Cimentos S.A. (companies controlled by CSN). In addition, he has been Director of the School of Economics at Fundação Getúlio Vargas in São Paulo since 2003. In the last 5 years, he has worked as professor of Economics at Fundação Getúlio Vargas, member of the Superior Council of Economics (COSEC) at FIESP/IRS and has been a member of the the Board of Directors of Fundação de Amparo à Pesquisa do Estado de São Paulo - FAPESP until 2015. Previously, he was Special Secretary for Economic Affairs at the Ministry of Finance and Secretary of Finance for the State of São Paulo. He holds a degree in Business Administration from Fundação Getúlio Vargas and a Master's and Doctorate from Cornell University, in the United States.

Antonio Bernardo Vieira Maia. Mr. Maia has been an independent member of the Company's Board of Directors since April 30, 2013, and a member of the Audit Committee since August 8, 2013, having held the position of Chairman of the Audit Committee from May 6, 2014 to 30 October 2017. He was also a member of the Company's Financial Committee from October 7, 2014 to December 31, 2016. He is the Chief Executive Officer of BRG Capital Ltda. since July 2005. Previously, he served as a member of the Board of Directors of the companies Transnordestina Logística S.A. (jointly controlled by CSN), FTL - Ferrovia Transnordestina Logística S.A. and CSN Mineração S.A. (controlled by CSN) and Director of Credit Suisse / Banco Garantia de Investimentos S.A. from April 1995 to May 2005. He started his career at Citibank Brasil as a trainee in 1982 and moved to Citibank in New York in 1986, where he served as Institutional Investment Analyst at Citigroup for Latin America, until becoming Director of Citibank New York. He was an associate at Banco Bozano Simonsen de Investimentos from August 1979 to December 1981 and a member of the Board of Directors of Banque Bénédict Hentsch & Cie SA, Geneva, Switzerland from April to December 2006. Graduated in Business and Public Administration from Fundação Getúlio Vargas.

Miguel Ethel Sobrinho. Mr. Sobrinho has been an independent member of the Company's Board of Directors since April 26, 2019, and a member of the Audit Committee since May 3, 2019. He also serves as an independent member of the Board of Directors of CSN Cimentos S.A. and CSN Mineração S.A. (companies controlled by CSN). He is a Director and shareholder of Participa - Empreendimentos Imobiliários e Participações Ltda., acting as an entrepreneur and developer of activities aimed at participating in shopping malls, water and gas energy projects and fast food chains. He holds a degree in Production Engineering from the Polytechnic School of the University of São Paulo, a Master's in Administration (MBA) from the Faculty of Economics and Administration of the University of São Paulo, he was Professor of Investment and Project Analysis at the Faculty of Economics and Administration of the University of São Paulo and member of the Board of Trustees and founder of the Fundação Instituto de Administração at Universidade de São Paulo.

Board of Executive Officers

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

Benjamin Steinbruch. See "—Board of Directors."

Marcelo Cunha Ribeiro. Mr. Ribeiro has held the position of Chief Financial Officer of the Company since September 29, 2017, being responsible for the treasury, controllership, tax and accounting areas, cumulating the functions of Investor Relations Officer since March 26, 2018. He also acts as Director of Minérios Nacional S.A., Director of Elizabeth Cimentos S.A., Superintendent and Investor Relations Director of CSN Cimentos S.A., Chief Financial Officer of Berkeley Empreendimentos e Participações S.A., member of the Board of Directors of CSN Mineração S.A., member of the Board of CSN Resources S.A., Chairman of the Board of Directors of FTL - Ferrovia Transnordestina Logística S.A., Administrative-Financial Director of Equimac S.A., member of the Board of Directors and member of the Strategic Committee of MRS Logística S.A., as well as Chairman of the Deliberative Council of Caixa Beneficente dos Empregados of the Company Siderúrgica Nacional - CBS and member of Stahlwerk's Supervisory Board Thüringen GMBH. Before joining CSN, he served as Chief Financial Officer of Grupo St. Marche, Vice President of Finance and Investor Relations at Restoque Comércio e Confeções de Roupas S.A., Chief Financial Officer of the SBF Group (GP Investimentos Ltd), Managing Director in the Private Equity area of GP Investimentos Ltd. and Chief Financial Officer of San Antonio International Ltd., as well as a member of the Board of Directors of Hopi Hari S.A., Telemar Norte Leste S.A. (Oi S.A.), Contax Participações S.A., Estácio Participações S.A., Magnesita Refratários S.A., and BR Towers SPE1 S.A.. Graduated in Production Engineering from the University of São Paulo and an MBA from the Harvard Business School.

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David Moise Salama. Mr. Salama has held the position of Executive Officer of the Company since August 2, 2011, being currently responsible for the areas of insurance, credit and property. He has worked at CSN since 2006, having previously held the position of Executive Director of Investor Relations. He is also an Officer of Estanho de Rondônia S.A., Chief Executive Officer of Companhia Florestal do Brasil, Chairman of the Board of Directors of CBSI - Companhia Brasileira de Serviços de Infraestrutura, Vice-Chairman of the Board of Directors of Itá Energética S.A., works in the management of CSN Islands VII Corp, CSN Islands XII Corp, Lulosider - Aços Planos S.A., Lulosider - Productos Siderúrgicos S.A. and Lulosider Ibérica S.A., alternate member of the Board of Directors of FTL - Ferrovia Transnordestina Logística S.A. (all companies controlled by CSN) and alternate member of the Board of Directors of Transnordestina Logística S.A. (jointly controlled by CSN). Previously, he served as a member of the Board of Directors of CSN Mineração S.A., Companhia Florestal do Brasil, Sepetiba Tecon S.A. and as Director of Minérios Nacional S.A. (all companies controlled by CSN), and as a member of the Deliberative Council of Caixa Beneficente dos Empregados da Companhia Siderúrgica Nacional - CBS. Before joining CSN, he was Controller and Finance Director at Tecnisa Engenharia e Comércio Ltda., Birmann S.A. Comércio e Empreendimentos and Goldfärb Comércio e Construções Ltda. He also held the position of Head of Consolidated Financial Information at Unilever Brasil Ltda. and Senior Auditor at PWC Auditores Independentes. Graduated in Accounting from the Faculty of Economics, Administration and Accounting of the University of São Paulo (FEA-USP), with an MBA in Finance from FEA-USP, he complemented his academic training with the Oxford Advanced Management and Leadership Program at Saïd Business School, from the University of Oxford, England, and the Program on Negotiation at Harvard Law School, United States.

Luis Fernando Barbosa Martinez. Mr. Martinez has been an effective member of the Company's Fiscal Council since JHe has held the position of Executive Officer of the Company since August 2, 2011, being currently responsible for the commercial and logistics areas of the steel, cement and special sales segments. He has worked at CSN since 2002, having previously held the role of Commercial Director. He also serves as Chairman of the Board of Directors, member of the Strategic Committee and of the Sustainability Committee of MRS Logística S.A. and alternate member of the Board of Directors of Transnordestina Logística S.A. (jointly controlled by CSN), Director of Estanho de Rondônia S.A. and CSN Energia S.A., Chief Executive Officer of Companhia Metalúrgica Prada, Commercial Director of CSN Cimentos S.A., alternate member of the Board of Directors of Transnordestina Logística S.A., works in the management of Stahlwerk Thuringen GMBH, CSN Mining Asia Limited, CSN Islands VII Corp, CSN Islands XII Corp, CSN Steel S.L.U., CSN Mining Holding S.L.U., CSN Steel Holdings 1, S.L.U., CSN Productos Siderúrgicos, S.L.U., Lulosider - Aços Planos S.A., Lulosider Projectos Siderúrgicos S.A., Lulosider Ibérica S.A. (all companies controlled by CSN), and is also a member of the Deliberative Council of Caixa Beneficente de Empregados da Companhia Siderúrgica Nacional - CBS.une 2018. He also serves as an effective member of the Fiscal Council of Via Varejo S.A., an effective member of the Board of Directors, a member of the Independent Committee of Related Parties and a member of the Financial and of Audit of Smiles Fidelidade S.A., Chairman of the Fiscal Council of Tecnisa S.A., Director of the Federation of Industries of the State of São Paulo - FIESP and alternate member of the Fiscal Council of B3 S.A. - Brazil, Stock Exchange, Counter. In addition, it carries out structured financial operations in the real estate market in renowned companies. In the last 5 years, he has served as an effective member of the Board of Directors of Via Varejo S.A., in addition to having carried out philanthropic treasury and fundraising activities for the União Brasileiro-Israelita do Bem Estar Social, a non-profit organization, as well as being member of the board of family businesses in the real estate sector. Graduated in Business Administration from Fundação Getúlio Vargas (FGV) and in Law from the Faculty of Law of the University of São Paulo, in addition to having the IBGC Board of Directors Certificate. He also served as a member of the Board of Directors of the Brazilian Association of Metallurgy, Materials and Mining - ABM until 2016 and as a member of the Board of Directors of the Chamber of Commerce and Industry Brazil - Germany until 2018. Previously, he served as a member of the Board of Directors of Nacional Minérios S.A., Companhia Florestal do Brasil, Companhia Metalúrgica Prada, Sepetiba Tecon S.A and CSN Mineração S.A. (all companies controlled by CSN). Before joining CSN, he was Commercial Director at Alcan Alumínio do Brasil S.A. company where he worked for 14 years in the areas of processes, quality, product/markets and commercial development, Executive Director of the CBCA - Brazilian Center for Steel Construction and ABCEM - Brazilian Association of Metallic Construction and President of the Brazilian Association of Steel Packaging - BLESSING He received the "Barão de Mauá Award - Instituto Mauá de Tecnologia (IMT) as Professional and Market Highlight in 2016" and is certified by the IBGC as an "Experienced IBGC Board Member (CCA + IBGC)". Graduated in Metallurgical Engineering from IMT - Instituto Mauá de Tecnologia, post-graduated in Industrial Administration from the School of Production Engineering of the University of São Paulo and completed his training in the Corporate Management Development Program from Alcan Aluminum Limited, Montreal, Canada.

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Eduardo Guardiano Leme Gotilla. Mr. Leme has held the position of Executive Officer of the Company since February 2, 2021, being responsible for the area of new projects. He is currently an effective member of the Deliberative Council of Caixa Beneficente dos Empregados da Companhia Siderúrgica Nacional - CBS and member of the board of MGI - Minas Gerais Investimentos. Previously, he was director of BB Previdência and CODEMIG/CODEMGE, Chairman of the Board of Directors and Chief Financial Officer of Magnesita Refratários S.A., Chief Financial Officer of Blu Pagamentos S.A., Global Chief Financial Officer of RHI Magnesita in London. in multinationals controlled by private equity, with experience in corporate finance, tax management, capital strategy, turnaround, performance management and investor relations. Graduated in Economics and Finance from the Brazilian Capital Market Institute (IBMEC).

Milton Picinini Filho. Mr. Filho has held the position of Executive Officer of the Company since June 7, 2021, being responsible for the production area of the steel segment. He is currently also an alternate member of the Supervisory Board of Caixa Beneficente dos Empregados da Companhia Siderúrgica Nacional – CBS and a member of the Supervisory Board of Stahlwerk Thüringen GMBH. From April 2018 to June 2021, he served as the Company's Product Director, responsible for all production in the hot, cold, galvanized and sheet metal areas of the Presidente Vargas Steelworks (UPV), as well as for the Company's Research Centers. , CSN Paraná and CSN Porto Real Operating Units. Previously, he held the position of General Manager of Planning and Performance at the Company from June 2017 to April 2018, being responsible for production planning and scheduling, budget monitoring, costs, performance indicators, performance KPIs and contract and contract management. areas of warehouses, flow and billing of the UPV and, from February 2010 to May 2017, he was General Manager of Production at CSN Porto Real, responsible for the Company Management area - Production, H&R, Administration, Controlling, Finance, Billing, Logistics Internal and External, Asset Security, Maintenance, Product Development and Quality, Environment and Technical Assistance. Graduated in Metallurgical Engineering from the Federal University of Rio de Janeiro and attended the Executive Development Program at Fundação Dom Cabral.

Stephan Heinz Josef Victor Weber. Mr. Weber has held the position of Executive Officer of the Company since June 7, 2021, being responsible for the investment area. Before joining the Company, he served as Chief Executive Officer of Scorpius Gold Brasil S.A., 3 Scorpius Gold Mineração S.A. and Brasil Calcarium S.A., from 2018 to 2021. He also worked, in Brazil and abroad, in steel and mining companies, such as African Minerals, Anglo American and Rio Tinto. Graduated in Metallurgical Engineering from the Federal University of Ouro Preto, with a Masters in Metallurgical Engineering from the Federal University of Minas Gerais and a degree in Global Business from the Saïd Business School at the University of Oxford, UK..

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. Pursuant to Brazilian Corporate Law, 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

In 2021, 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\$46.6 million, which includes salaries, bonuses, profit sharing arrangements and benefits, such as medical assistance, pension plan contributions and life insurance, among others. In 2021, the aggregate compensation paid by us to all members of our fiscal committee for services was R\$0.64 million.

See “—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 financial statements and report findings to shareholders. As of the date of this annual report, we have a fiscal committee in place, which was most recently elected by our annual shareholders' meeting in April 2022, with a term until our next annual shareholders' meeting in April 2023. Our fiscal committee comprises three effective members and three

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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:

Name	Position	Age ⁽¹⁾	First Elected on	Last Elected on
Angélica Maria de Queiroz	Chairwoman	64	June 29, 2018	April 29, 2022
Valmir Pedro Rossi	Member	60	April 30, 2020	April 29, 2022
André Coji	Member	57	June 29, 2018	April 29, 2022

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

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

Angélica Maria de Queiroz. Ms. Queiroz currently holds the position of Chairwoman of the Company's Fiscal Council, to which she was elected in May 2022. She has been a member of the Fiscal Council since June 2018, initially occupying the position of alternate member and becoming an effective member after replacement of a full member made in February 2022. He also serves as a member of the Audit Committee of CSN Mineração S.A. since January 2021 and is an associate and Director of the Public Policy Debate Center - CDPP. In addition, she has been a member of the Advisory Board of IBGT (Brazilian Institute of Management and Turnaround) since 2005, founding partner of Clear Horizon (2002), a strategy consultant for national and international companies (acting in the areas of supply and distribution, production and sales , administrative and financial) and member of the Fiscal Council/Audit of the NGO Américas Amigas. She worked as an independent consultant for the Audit Committee of Companhia Siderúrgica Nacional from 2011 to 2017. Graduated in Economic Sciences from the Pontifical Catholic University of Rio de Janeiro and a postgraduate degree in Finance from Fundação Getúlio Vargas in Rio de Janeiro.

Valmir Pedro Rossi. Mr. Rossi has been an effective member of the Company's Fiscal Council since April 2020. He is a member of the Board of Directors and Fiscal Council member certified by the IBGC - Brazilian Institute of Corporate Governance. He is also a member of the Fiscal Council of the companies FRAS-LE S.A and CADAM S.A., an alternate member of the Fiscal Council of Banco Santander Brasil S.A. and member of the Audit and Integrity Committee at BRF S.A. and Grupo SIMPAR S.A. (JSL, Movida, Vamos, etc.). He is a member of the Ethics Committee in Corporate Governance of the IBGC. Previously, he worked as an Accountant at Casfor Org. Contábeis e Bertol S.A., as a consultant at Sebrae RS, and worked for 30 years at Banco do Brasil S.A., holding various positions. He was President of Banco da Amazônia S.A. and member of the Board of Directors or member of the Fiscal Council of the following companies: Metalúrgica Gerdau S.A., Brasilprev S.A., BB Seguridade S.A., Banco da Amazônia S.A. and Kepler Weber S.A., in addition to several entities and associations. Graduated in Accounting from the University of Passo Fundo (RS), with a postgraduate degree in Finance from the University of Caxias do Sul (RS) and in Marketing from PUC Rio de Janeiro (RJ), and MBAs in Administration from the University of São Paulo (SP) and in Business Management from UNB-Brasília (DF).

André Coji. Mr. Coji He has been an effective member of the Company's Fiscal Council since June 2018. He also serves as an effective member of the Fiscal Council of Via Varejo S.A., an effective member of the Board of Directors, a member of the Independent Committee of Related Parties and a member of the Financial and of Audit of Smiles Fidelidade S.A., Chairman of the Fiscal Council of Tecnisa S.A., Director of the Federation of Industries of the State of São Paulo - FIESP and alternate member of the Fiscal Council of B3 S.A. - Brazil, Stock Exchange, Counter. In addition, it carries out structured financial operations in the real estate market in renowned companies. In the last 5 years, he has served as an effective member of the Board of Directors of Via Varejo S.A, in addition to having carried out philanthropic treasury and fundraising activities for the União Brasileiro-Israelita do Bem Estar Social, a non-profit organization, as well as being member of the board of family businesses in the real estate sector. Graduated in Business Administration from Fundação Getúlio Vargas (FGV) and in Law from the Faculty of Law of the University of São Paulo, in addition to having the IBGC Board of Directors Certificate.

Audit Committee

In June 2005, we appointed an audit committee (*comitê de auditoria*), which comprises independent members of our board of directors with a term of office of two years, with reelection permitted. Our audit

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committee is responsible for recommending to our board of directors the appointment of independent auditors, reporting on our auditing policies and our annual audit plan prepared by our internal auditing team, as well as monitoring and evaluating the activities of our independent auditors. Our audit committee has also been tasked with identifying, prioritizing and submitting actions to be implemented by our executive officers, analyzing our annual report and financial statements and making recommendations to our board of directors. Our audit committee comprises Mr. Yoshiaki Nakano, Mr. Antonio Bernardo Vieira Maia and Mr. Miguel Ethel Sobrinho. 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.

Our audit committee holds at least one ordinary meeting every three months and extraordinary meetings whenever necessary.

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 “—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, 2019, 2020 and 2021, we had 24,869, 23,196 and 24,660 employees, respectively. As of December 31, 2021, 3,049 of our employees were members of the Steelworkers’ Union of Volta Redonda, which is affiliated with the Força Sindical, which is a national union. We believe we have a good relationship with the Força Sindical. We have collective bargaining agreements, renewable annually in May of every year. Moreover, we have members affiliated with other unions, such as the Engineers’ Union with five members, and the Workers’ Union from Camaçari, with a total of seven members. At all other companies controlled by us, including ERSA, CSN Mineração, FTL and TLSA, we have a total of 257 employees that are members of unions.

We maintain 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 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, we carry out transactions involving the payment of contributions and recognition of actuarial liabilities calculated in defined benefit plans. For more information, see note 26 to our audited consolidated financial statements included elsewhere in this annual report.

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 101,502 of our outstanding common shares as of December 31, 2021.

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

As of December 31, 2021, our capital stock comprised 1,387,524,047 common shares, each of which entitles its holder to one vote at our shareholders’ meetings. Our major shareholders do not have different voting rights from our other shareholders. For more information, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Our Common Shares and the ADSs—Our controlling shareholder has the ability to direct our business and affairs and its interests could conflict with yours.”

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The following table sets forth, as of December 31, 2021, the number of our common shares owned by our major shareholders:

	Common Shares	
	Shares Owned	Percent of Outstanding Shares
Vicunha Aços S.A. ⁽¹⁾	679,522,254	48.97%
Rio Iaco Participações S.A. ⁽¹⁾	45,706,242	3.29%
Free float	616,505,551	44.43%
Treasury	45,790,000	3.30%
Total	1,387,524,047	100.00%

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

7B. Related Party Transactions

Our transactions with related parties consist of (i) transactions with subsidiaries, jointly controlled entities, associates, exclusive funds and other related parties; and (ii) transactions with other unconsolidated related parties.

Following is an overview of the types of related party transactions we enter into:

- 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.
- We maintain relations with other unconsolidated related parties, which include, among others, CBS Previdência, Fundação CSN, Banco Fibra, Ibis Participações e Serviços Ltda., Partifib Projetos Imobiliários Ltda., Vicunha Imóveis Ltda., Vicunha Serviços Ltda.

In addition, we guarantee certain indebtedness of related parties. For more information, see “Item 5. Operating and Financial Review and Prospects—5B. Liquidity and Capital Resources—Off-Balance Sheet Arrangements—Guarantees of Debt.”

We maintain internal controls to detect, prevent and address potential conflicts of interest in our transactions, including those with related parties, in order to ensure that all transactions are appropriately documented, characterized and accounted for. Our related party transactions are subject to approval based on our best interest and market terms and conditions. For more information on our related party transactions, see note 22 to our audited consolidated financial statements included elsewhere in this annual report.

7C. Interests of Experts and Counsel

Not applicable.

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

See our audited consolidated financial statements included elsewhere in this annual report.

Legal and Administrative 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 have established provisions for all amounts in dispute that represent a probable risk of loss based on the legal opinion of our internal and external legal counsel. We have not established provisions for any amounts in dispute that represent a possible or remote risk of loss based on the legal opinion of our internal and external legal counsel. For more information, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—We are exposed to the risks of litigation.”

Developments relating to the COVID-19 pandemic adversely affected the workflow of the Brazilian legal and administrative system in 2020 and 2021. Further developments may continue to affect expected timelines relating to the administrative, judicial and arbitration proceedings we are party to.

[Table of Contents](#)*Labor Contingencies*

As of December 31, 2021, we and our subsidiaries were defendants in 8,884 labor claims, for which we recorded a provision of R\$304.7 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.

We update our provisions for labor contingencies as a result of the closing of lawsuits and our constant revision of accounting estimates, which consider, among other factors, the nature of the claims involved.

Civil Contingencies

Our civil contingencies relate mainly to indemnity claims resulting from contractual disputes and collections, claims for damages and compensation related to our commercial and industrial activities and real estate disputes. As of December 31, 2021, we had recorded a provision of R\$139.8 million for these civil contingencies.

Tax Contingencies

Our main tax contingency relates to a tax assessment notice involving R\$13.1 billion (as of December 31, 2021) 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, the case is pending final judgement. 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, which we replaced with certain other assets in 2020. At the end of 2019, the court issued a decision favorable to us and cancelled the CARF judgment at the administrative level due to legal nullities and, as of the date of this annual report, the case is pending final judgment by the second level judicial court. 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\$3.16 billion, as of December 31, 2021. 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 challenged the formal requirements of the Federal Prosecutor's Office's appeal at the judicial level. In 2020, we filed an annulment lawsuit to contest the merits of the tax assessment and entered into an agreement (*negócio jurídico processual*) that was approved by the court. Following the closing of the administrative proceeding, tax enforcement was ordered and, pursuant to the agreement we entered into, we will present certain collateral and installment payments.

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\$1.07 billion, as of December 31, 2021. In June 2019, we filed our appeal to CARF, which issued a decision favorable to us in December 2019. This decision is subject to appeal to the Superior Chamber of CARF and the case is pending final judgment.

In addition, we received tax assessment notices in December 2015 and December 2016 for R\$1.05 billion and R\$963 million as of December 31, 2021, respectively, for an allegedly improper deduction of interest expenses in pre-payment contracts between us and Namisa. With regards to the December 2015 tax assessment, after a partially favorable decision issued by CARF that reduced the amount of the tax assessment, we filed an

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annulment lawsuit to challenge to remainder of the tax assessment, which is suspended until a final judgment of the annulment lawsuit is rendered. With regards to the December 2016 tax assessment, we filed an annulment lawsuit to contest the tax assessment and the Federal Prosecutor's Office filed a tax enforcement. Both are pending court 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 constituted a cartel. We challenged the cartel allegation and the imposition of the fine in court and, in June 2003, obtained a partially favorable decision by a federal trial court of first instance. CADE appealed the lower trial court decision and, in June 2010, a federal appellate court in Brasília reversed the lower 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, which upheld the ruling in favor of CADE. We subsequently appealed the decision of the Superior Court of Justice to Brazil's Supreme Court and, as of the date of this annual report, are awaiting a final decision. We have not 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. In 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.

In April 2021, we requested an additional extension of this timeframe and, as of the date of this annual report, CADE has not yet approved or denied our request. If CADE denies our request, we may be subject to fines, specific performance of the obligation to reduce our equity stake in Usiminas and the intervention of a third party nominated by CADE with a mandate to perform our obligations under the TCD.

Northeastern Railway System Proceedings

The TCU initiated proceedings in 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 Brazilian 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 5. Operating and Financial Review and Prospects—5B. Liquidity and Capital Resources—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 approved an injunction suspending 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.

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In 2019, we revised the engineering project for the development of Northeastern Railway System II and delivered an update regarding the completed and ongoing project phases in order to validate our budget and revise our schedule, which has not been altered since then.

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 respect to 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.

Following a valuation conducted by ANTT, ANTT concluded that FTL did not comply with the TAC regarding its failure to meet 2013 production targets. ANTT recommended that the Brazilian federal government terminate the FTL concession agreement and initiate an administrative proceeding before the Superintendence of Infrastructure and Railroad Cargo Transport Services (*Superintendência de Infraestrutura e Serviços de Transporte Ferroviário de Cargas*). FTL has appealed this conclusion and recommendation and, as of the date of this annual report, is awaiting ANTT's response.

Furthermore, in 2017, ANTT also initiated proceedings claiming that TLSA did not comply with certain of its obligations arising from its concession agreement. ANTT's technical area and board, in a unilateral opinion, concluded that TLSA breached its contractual obligations under the concession agreement and recommended that the Brazilian federal government terminate TLSA's concession to operate the Northeastern Railway System II.

In September 2020, we filed a request for reconsideration and suspension of the injunction with the TCU. We requested that the TCU's understanding be revised in order for disbursements by government agencies to be immediately released or, alternatively, that disbursements by the government agency FINOR be immediately released. These disbursements would provide reimbursement of the amounts already proved to have been applied in the project, and which we understand are not subject to suspension by the TCU.

In July 2021, the ANTT approved a regulatory budget of R\$8.9 billion, which amount was revised in December 2021, following a request for reconsideration, to R\$10.8 billion. As of the date of this annual report, we have received no disbursement from FINOR.

Environmental Proceedings

Our main environmental contingencies comprise: (i) notices of alleged environmental infractions; (ii) annulment lawsuits arising from fines; and (iii) public civil actions. As of December 31, 2021, we had recorded an aggregate provision of R\$16,942 million relating to these environmental contingencies.

Environmental Proceedings Related to Presidente Vargas Steelworks and Volta Redonda

In September 2018, we signed a TAC 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*), with the commitment to carry out new studies and investments to update the environmental control equipment of Presidente Vargas Steelworks, thereby maintaining its full operations. In parallel, INEA issued an AAF, valid until October 2024, that authorizes the regular operations of Presidente Vargas Steelworks during its compliance with the TAC. The TAC 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.

In July 2012, the Rio de Janeiro State Prosecutor's Office filed a public civil action against us claiming that we must (i) remove all waste disposed in an area 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. In August 2013, the Federal Prosecutor's Office filed a judicial civil proceeding against us based on these same claims. In both cases, 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 Rio de Janeiro State Prosecutor's Office. 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. In January 2019, the Superior Court of Justice decided that the both lawsuit should be decided by the federal court. We have also received, as of the date of this annual report, 51 notices for lawsuits brought by certain homeowners at Volta Grande IV Residential, claiming indemnification for alleged moral and material damages, and, in January 2020, an additional public civil action was filed against us relating to adverse health effects allegedly caused by water contamination from our operations. We presented our defense in October 2021 and the court ordered that this public civil action be ruled upon together with the prior proceedings.

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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, which in turn is also suspended until the expert examination that will be carried out as part of the public civil action filed in 2012 by the Federal Prosecutor's Office.

In addition, we are defendants, together with certain current and former members of our management, in a criminal action alleging our failure to adopt precautionary measures required by INEA regarding the risk of environmental damage in the Volta Grande IV neighborhood in the city of Volta Redonda. This criminal action was dismissed at first instance and, as of the date of this annual report, awaits judgment by the court upon the appeal of the Federal Prosecutor's Office. We are also subject to ongoing police investigations related to alleged inappropriate air emissions, irregular effluent disposal, water and soil pollution, and improper transportation, storage and disposal of waste.

In July 2018, the Federal Prosecutor's Office and the Rio de Janeiro State Prosecutor's Office filed a public civil action against us, Harsco Metals Ltda. and INEA, for immediate removal of slag piles, owned by us and operated by Harsco Metals Ltda., in the city of Volta Redonda that adjoin the Paraíba do Sul River. The plaintiffs claim inadequate environmental control measures and lack of enforcement by INEA. 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 Metals Ltda. and INEA to immediately limit the amount of slag received monthly, as well as the height of the piles at four meters. Any non-compliance with the preliminary injunction may result in fines of approximately US\$600,000 per month. We filed an appeal against this preliminary injunction, which is pending a final decision.

Concerning other allegedly contaminated areas in Volta Redonda, the Federal Prosecutor's Office has filed three additional public civil actions for the environmental remediation and indemnification of certain areas, as well as for moral and material damages of residents of neighboring areas. These actions are in an early stage and, following our environmental studies to determine possible environmental damage and to ensure our compliance with all applicable laws, we presented our defense in each of these public civil actions.

In June 2015, the Federal Prosecutor's Office filed a public civil action against us, INEA and the state of Rio de Janeiro in the federal court in Volta Redonda seeking (i) suspension of our sintering activities at Presidente Vargas Steelworks, (ii) to have INEA abstain from renewing or granting any license to us until we comply with applicable law and (iii) moral and material damages allegedly caused by water and atmospheric pollution deriving from noncompliant operations. As of the date of this annual report, we have presented our defense and await the next steps in the proceeding.

Other Environmental Proceedings

In the late 1980s, the Federal Prosecutor's Office, the Rio de Janeiro State Prosecutor's Office and the Macaense Association filed four public civil actions 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 investigations, which are still ongoing.

We are also party to two public civil actions filed against us by the Federal Prosecutor's Office and the Rio de Janeiro State Prosecutor's Office in the federal court of Volta Redonda seeking moral and material damages due to alleged environmental damage caused in the 1980s and 1990s by our use of certain landfills in Volta Redonda without the appropriate environmental license. It is important to note that one of these lawsuits has a claim in the approximate amount of R\$300,000,000. In December 2021, after presenting our defense, the court ordered a conciliatory session in order to clarify technical matters relating to the environmental management of the area with INEA, as well as suspension of the proceedings.

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Regarding the cement factory in the city of Arcos in the states of Minas Gerais, we are subject to a civil investigation regarding our activities to verify (i) the environmental requirements of our cement plant in the city; (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; and (iv) our actions for the preservation of cultural heritage and compensatory measures.

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, which may seek to impose fines, freeze our bank accounts or initiate a criminal investigation. In June 2018, we settled a new judicial agreement in order to extend the deadlines for this restoration. We expect to enter into a third agreement with government authorities and other parties involved in this claim in order to set cost-effective and functional standards for restoration.

In December 2019, the Public Prosecutor's Office filed a public civil action against TECON and INEA to suspend the environmental licensing process of TECON's container terminal until completion of the study on the environmental support capacity of the Sepetiba Bay. In December 2019, the court rejected the preliminary injunction requested by the Public Prosecutor's Office to suspend the licensing process. The proceeding remains in the initial phase.

In June 2019, we filed a lawsuit to contest a notification from INEA regarding suspension of the solid bulk operations at TECON due to these operations allegedly not being within the scope of permitted activities under TECON's operating license. We also requested a preliminary injunction, which was granted, to suspend the effects of the notification and to continue operations pending final judgment of the lawsuit. The proceeding remains in the initial phase.

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.

We are party to public civil actions filed by, among others, the Minas Gerais State Prosecutor's Office to compel our mining entity (Minérios Nacional) to take security measures at the Fernandinho dam complex. These public civil actions have pleaded, among other things, 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. As of the date of this annual report, the proceeding has been suspended as we seek to reach an agreement with the plaintiffs for ending the related public civil actions.

In April 2019, the Minas Gerais State Prosecutor's Office filed a public civil action to compel us to adopt mitigating measures regarding the psychological risks and losses allegedly generated by the Casa de Pedra dam, including relocating residents and indemnifying the value of their homes, bearing rent and social assistance expenses and relocating the children who attended the daycare center and school that have been closed. The Minas Gerais State Prosecutor's Office also pleaded for the payment of collective moral damages. In November 2021, a first instance ruling ordered that we pay rent for residents to relocate and that we construct the daycare center and school that were closed. We filed an appeal, which has suspended the ruling until the appeal is considered by the court.

We are also subject to public civil investigations at the federal and state levels that monitor the regularity of our dams. In 2019, we signed a preliminary agreement term with the Federal Prosecutor's Office, referring to five of our dams, with which we have fully complied.

In October 2017, CSN Mineração entered into an agreement with the Minas Gerais State Prosecutor's Office agreeing to adopt certain measures, including some specified in the technical report prepared by the Minas Gerais State Prosecutor's Office regarding the Casa de Pedra dam complex in order to comply 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 and have requested a certificate of full compliance (*Certidão de Cumprimento Integral*) and the closure of the investigation, which, as of the date of this annual report, are pending.

In February 2022, CSN Mineração and Minérios Nacional signed certain TACs with the Federal Prosecutor's Office, the Minas Gerais State Prosecutor's Office, the state of Minas Gerais, the State Environmental Foundation and the ANM in order to define the necessary security measures and the procedures and timeline required for the decharacterization of our B4, Vigia, Vigia auxiliary, B2 and B2 auxiliary dams.

[Table of Contents](#)Other Environmental Liabilities

Our main environmental liabilities as of December 31, 2021 were associated with environmental recovery at former coal mines decommissioned in 1989 in the state of Santa Catarina, as well as environmental recovery due to previous operations in Presidente Vargas Steelworks.

We record a provision for remediation costs and environmental claims when a loss is probable, the amount can be reasonably estimated and we may incur a legal obligation. 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, 2021, we had provisions for environmental liabilities in the total amount of R\$173.6 million, as compared to R\$192.8 million as of December 31, 2020. We believe our provisions are sufficient to cover all probable losses in environmental proceedings.

The following table sets forth our provisions for environmental liabilities as of the dates indicated:

	<i>(in millions of R\$)</i>
December 31, 2020	192.3
TACs ⁽¹⁾	(0.5)
Decommissioned coal mines (Santa Catarina)	(25.6)
Landfills and other ⁽²⁾	6.9
December 31, 2021	173.6

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

(2) Refers to an estimated calculation of recovery costs related to landfill remediation obligations.

Arbitration

In January 2021, our subsidiary CSN Mineração was notified of the commencement of a confidential arbitration regarding its alleged default under certain iron ore supply agreements, involving the amount of US\$1.0 billion. We believe the allegations are unfounded and are not aware of the basis used by the claimant to determine the amount involved in this proceeding. In addition, despite the allegations, CSN Mineração is a creditor under this agreement. We will conduct our legal defense with all available means.

Other Legal and Administrative Proceedings

We are defendants in other legal and administrative proceedings involving claims in the aggregate amount of R\$35,305 million as of December 31, 2020, as compared to R\$35,785 million as of December 31, 2019, of which (i) R\$35,008 million relate to tax contingencies as of December 31, 2020 (R\$32,110 million as of December 31, 2019), (ii) R\$1,899 million relate to civil contingencies as of December 31, 2020 (R\$1,814 million as of December 31, 2019), (iii) R\$1,506 million relate to labor contingencies and social security contingencies as of December 31, 2020 (R\$1,560 million as of December 31, 2019) and (iv) R\$658 million relate to environmental contingencies as of December 31, 2020 (R\$300 million as of December 31, 2019). 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 provision for contingencies in this regard.

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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 presented to corroborate the statements initially made. In March 2021, the Supreme Court ruled on the preliminary injunction of a constitutional appeal, which had been filed in favor of our chairman and chief executive officer and suspended electoral investigations due to a lack of evidence. On December 3, 2021, the Federal Supreme Court granted an ex officio order to close the police inquiry and all the related proceedings ongoing at the Electoral Court. At analyzing the merit of the constitutional appeal, the Justices recognized the illegal constraint imposed to the Chief Executive Officer due to the exceeded time of the investigations and the lack of crime evidence able to justify the continuity of the case. Therefore, the inquiry carried at the Electoral court have been shut down since then.

Cement Operations Investigations

The Chairman of the Company's Board of Directors was summoned to provide clarification in May/2021 in the context of a police investigation launched by the Federal Police in January/2021, based on an anonymous complaint, to investigate an alleged cartel, by cement manufacturers.

The Company clarifies that it acts in accordance with current legislation and in compliance with ethical and legal parameters, not corroborating practices that violate free market competition, and that it will collaborate with the authorities and provide the necessary clarifications within the scope of this investigation, but given the stage preliminary investigation, cannot predict its results and impacts, if any.

Police inquiry that requests information regarding invoices for cement transport contracts

On June 29, 2021, the Company received a letter from the Federal Police requesting information regarding invoices referring to cement transport contracts entered into with a company providing transport services, representing approximately 1% of the volume of services of this nature contracted by the Company. Said company was contracted based on competitive price-taking processes conducted by the Company. In the document that resulted in the initiation of the investigation, the chairman of the Company's Board of Directors is mentioned in this capacity. To date, no representative of the Company has been formally indicted in the context of this investigation. The Company carried out an internal investigation confirming that the payments made to this supplier correspond to cement transportation services actually provided, at prices compatible with those of other suppliers, under similar conditions. The result of the internal investigation was presented to the Police Authority.

Dividend Policy

General

Subject to certain exceptions set forth in Brazilian Corporate Law, our bylaws require that we pay an annual 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) our required investments; and (iv) the preservation of our liquidity and solid capital structure.

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

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

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 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, if not set forth in our bylaws, (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, must 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. 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. Without prejudice to payment of the mandatory dividend. Our bylaws do not provide for any other discretionary reserve.

Contingency Reserve. Under Brazilian Corporate Law, a percentage of our "net profits" may be allocated to a contingency reserve for estimable losses that are considered probable in future years. Any amount so allocated in a prior year must either be reserved in the fiscal year in which the loss had been anticipated, if the loss does not occur as projected, or be written off in the event that the anticipated loss occurs.

Tax Incentive Reserve. Our shareholders in a shareholders' meeting may, following a proposal by management, 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 retained earnings reserve may not be greater than our capital stock; if it is, the distribution of this surplus is decided at a shareholders' meeting.

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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 in this annual report 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, 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. This 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 must be registered as a special reserve and, if not absorbed by losses in subsequent fiscal years, must be paid as a dividend as soon as our financial condition permits.

Payment of Dividends

We are required to hold annual shareholders’ meetings within the first four months after the end of our fiscal year at which an annual dividend may be declared. Additionally, our board of directors may declare interim dividends. Under Brazilian Corporate Law, dividends are generally required to be paid to the holder of record on a dividend declaration date within 60 days following the date the dividend was declared, unless a shareholders’ resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or interest on shareholders’ equity as described under “—Additional Payments on Shareholders’ Equity” below) in respect of the common shares it holds, 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 *reais* to our ADR custodian on behalf of our ADR depository. Our ADR custodian will then convert the proceeds into U.S. dollars and will cause the U.S. dollars to be delivered to our ADR depository for distribution to holders of ADSs.

Additional Payments on Shareholders’ Equity

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 2021 was 5.32% *per annum*.

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.

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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 Citibank, 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. 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, 2021, the aggregate market capitalization of the B3 was R\$3.9 trillion and the ten largest companies listed on the B3 represented 48.7% of the total market capitalization of all listed companies. In contrast, as of December 31, 2021, the aggregate market capitalization of the NYSE was US\$26.2 trillion. Although any of the outstanding shares of a listed company may trade on the B3, in most cases fewer than half of the listed shares are actually available for trading by the public, the remainder being held by small groups of controlling persons, by government entities or by one principal shareholder. See “Item 3. Key Information—3D. Risk Factors—Risks Relating to Our Common Shares and the 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, 2021, we accounted for approximately 0.76% 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, which is the principal law governing the Brazilian securities markets, and by Brazilian Corporate Law and regulations issued by the CVM, 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.

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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 the Brazilian Securities Law, 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.

Resolution No. 358, as amended, sets forth the CVM's 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 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. In 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) 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

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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 .

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. For a detailed description of the general duties and powers of our board of directors, see "Item 6. Directors, Senior Management and Employees—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 in this annual report by reference.

Overview

As of December 31, 2021, 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.

[Table of Contents](#)*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 ("*voto múltiplo*") in an election of our board of directors. Pursuant to Brazilian Corporate Law and according to CVM guidance, as our capital stock comprises only common shares, shareholders holding at least 10% of our common shares in the three consecutive months prior to our shareholder's meeting have the right to appoint a member of our board of directors ("*eleição em separado*").

Shareholders' Meetings

Pursuant to Brazilian Corporate Law, the shareholders present at an annual or extraordinary shareholders' meeting, convened and held in accordance with Brazilian Corporate Law and our bylaws, are empowered to decide all matters relating to our corporate purpose and to pass any resolutions they deem necessary for our protection and well-being.

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

Shareholders' meetings are called, convened and presided over by the chairman of our board of directors or, in his absence, by whom he appoints. Brazilian Corporate Law requires that our shareholders' meeting be convened by publication of a notice in 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 30 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 and, if the shareholder is a natural person, may be represented by another shareholder, a company officer, a lawyer or a financial institution, and, if the shareholder is a legal entity, anyone may act as proxy. 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, but will not be allowed to vote.

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, including 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

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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 ten 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 other things, 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. For more information, see "Item 3. Key Information—3D. Risk Factors—Risks Relating to Our Common Shares and the ADSs—Holders of ADSs may be unable to exercise preemptive rights with respect to our common shares."

Form and Transfer

As our common shares are in registered form, their transfer 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.

[Table of Contents](#)*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 CMN Resolution 4,373 or its direct foreign investment regulations. See “—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) 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

According to CMN 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. CMN 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 CMN Resolution 4,373, a 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.

CMN 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 CMN 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.

CMN 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 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, are entitled to favorable tax treatment.

A certificate of registration has been issued in the name of Citibank, N.A., as our ADR depositary, and is maintained by Banco Bradesco S.A., our ADR custodian, on behalf of our ADR depositary. Pursuant to the certificate, our ADR custodian and our ADR depositary are able to convert dividends and other distributions with respect to our common shares represented by the ADSs into foreign currency and remit the proceeds outside Brazil. Pursuant to CMN Resolution 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 is 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 common shares directly on the B3.

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 exposes the non-Brazilian holder to exchange rate variation and may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder.

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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 3. Key Information—3D. Risk Factors—Risks Relating to Our Common Shares and the 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 the 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 the 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 and Brazil, as in effect on the date of this annual report, 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. 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 the ADSs.

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 the 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 the ADSs.

A Non-Resident Holder of ADSs may withdraw them in exchange for our common shares in Brazil. Pursuant to Brazilian law, the Non-Resident Holder may invest in common shares under CMN Resolution 4,373 (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 the 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. We do not have any profits generated prior to January 1, 1996.

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 their 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.

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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 (each, a “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 transactions carried out on the organized over-the-counter market):

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

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

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

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%, are determined according to the following table:

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

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In the cases described above, if the gains are related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation, 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 a 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 the Central Bank.

Gains on the Exchange of Common Shares for ADSs

The deposit of common shares in exchange for 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 CMN Resolution 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.

[Table of Contents](#)*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 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 transaction at any time, but such an increase will only apply in respect of future foreign exchange transactions. Currently, for most foreign exchange transactions related to investments in common shares, the IOF/Exchange rate is zero.

IOF on Bonds and Securities Transactions

IOF may also be levied on transactions involving bonds and securities, or "IOF/Securities", including those carried out on Brazilian stock, futures or commodities exchanges. The rate of the IOF/Securities applicable to most transactions involving common shares is currently zero. 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-Resident 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) that holds the common shares or ADSs as "capital assets" (generally property held for investment) within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended (the "Code"). This summary is based upon the Code, its legislative history, U.S. Treasury Department 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 estate tax, gift tax, alternative minimum tax or 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 our common shares or the 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, partnerships and other pass-through entities, U.S. expatriates, investors that own, have owned or are treated as owning, directly, indirectly or constructively 10% or more of our stock by vote or value, "controlled foreign corporations", certain investors who file applicable financial statements required to recognize income when the associated revenue is reflected on such financial statements, investors that hold our common shares or the 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 U.S. Treasury Department 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.

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If a partnership (or any other entity taxable as a partnership for U.S. federal income tax purposes) holds our common shares or the ADSs, the U.S. federal 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 common shares or the ADSs should consult its own tax advisor.

In general, for U.S. federal income tax purposes, holders of ADRs 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, (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 non-taxable return of capital to the extent of the U.S. Holder’s adjusted tax basis in the common shares or the 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 common shares or ADSs for more than one year. We do not intend to maintain calculations of our earnings and profits under U.S. federal income tax principles and, unless and until such calculations are made, U.S. Holders should assume all distributions are made out of earnings and profits and constitute dividend income.

The dividend income will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations. Subject to certain exceptions for short-term and hedged positions, certain non-corporate U.S. Holders (including individuals) may qualify for a maximum 20% rate of tax in respect of “qualified dividend income” received. Dividend income with respect to the ADSs will be qualified dividend income, *provided* that, in the year that a non-corporate U.S. Holder receives the dividend, the ADSs are readily tradable on an established securities market in the United States, and we were not in the year prior to the year in which the dividend was paid, and are not in the year in which the dividend is paid, a PFIC. Based on existing IRS guidance, it is not entirely clear whether dividends received with respect to our common shares not held through ADSs will be treated as qualified dividend income, because our 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. A U.S. Holder should not recognize any foreign currency gain or loss in respect of such dividend if such *reais* are converted into U.S. dollars on the date received by the U.S. Holder. If the *reais* are not converted into U.S. dollars on the date of receipt, however, gain or loss may be recognized upon a subsequent sale or other disposition of the *reais*. Such foreign currency gain or loss, if any, 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. U.S. Holders should consult with their own tax advisors regarding the treatment of any foreign currency gain or loss if any *reais* received as a dividend on our common shares or the ADSs is not converted into U.S. dollars on the date of receipt.

Dividends received by most U.S. Holders will constitute foreign source “passive income” for foreign tax credit purposes. For purposes of the U.S. foreign tax credit limitation, foreign source income is separated into different “baskets,” and the credit for foreign taxes on income in any basket is limited to the U.S. federal income tax allocable to such income.

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 may be treated as foreign income tax eligible for credit against a U.S. Holder’s U.S. federal income tax liability, *provided* that the withholding tax constitutes a “covered withholding tax” under recent U.S. regulations (or at a U.S. Holder’s election, may be deducted in computing taxable income, *provided* that, in the case of any “covered withholding tax”, the U.S. Holder has elected to deduct all foreign income taxes

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paid or accrued for the relevant taxable year). The rules with respect to foreign tax credits are complex and recent U.S. regulations have imposed additional requirements that must be met for a foreign tax to be creditable (including requirements that a “covered withholding tax” be imposed on nonresidents in lieu of a generally applicable tax that satisfies the regulatory definition of an “income tax”, which may be unclear or difficult to determine). 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. federal income taxation on a net 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 may be subject to preferential rates where the property is held for more than one year. The deductibility of capital losses is subject to limitations under the Code.

Capital gain or loss, if any, realized by a U.S. Holder on the sale, exchange or other taxable disposition of common shares or ADSs generally will be treated as U.S. source gain or loss for U.S. foreign tax credit purposes. 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). Under recent U.S. regulations mentioned above, Brazilian withholding tax imposed on such U.S. source gain may not constitute a creditable tax. Moreover, even if the tax is a creditable tax, the U.S. Holder may be unable to benefit unless it can apply the credit against U.S. federal income tax payable on other income from foreign sources from the relevant foreign tax basket. 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. federal income taxation on a net basis in respect of gain from the sale or other disposition of the common shares or ADSs); or

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- 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 the 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 (and it is possible the IRS could reach a contrary conclusion), 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 the current or any 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 we own at least 25% by value of the stock of another corporation, we will be treated for purposes of the PFIC tests as owning our proportionate share of the assets of the other corporation, and as receiving directly our 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 us to the U.S. Holder (generally, any distributions to the U.S. Holder in respect of the common shares or ADSs during a single taxable year that are greater than 125% of the average annual distributions received by the U.S. Holder with respect to the common shares or ADSs during the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the common shares or ADSs). Under these rules, (i) the gain or excess distribution would be allocated ratably over the U.S. Holder's holding period for the common shares or ADSs, (ii) the amount allocated to the taxable year in which the gain or excess distribution was realized would be taxable as ordinary income, (iii) the amount allocated to each prior year, with certain exceptions, would be subject to tax at the highest tax rate in effect for that year and (iv) the interest charge generally applicable to underpayments of tax would be imposed in respect of the tax attributable to each such prior year.

If we are treated as a PFIC and, at any time, we invest in non-U.S. corporations that are classified as PFICs (each, a "Subsidiary PFIC"), U.S. Holders generally will be deemed to own, and also would be subject to the PFIC rules with respect to, their indirect ownership interest in that Subsidiary PFIC. If we are treated as a PFIC, a U.S. Holder could incur liability for the deferred tax and interest charge described above if either (i) we receive a distribution from, or dispose of all or part of our interest in, the Subsidiary PFIC or (ii) 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 Department 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 U.S. Treasury Department 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.

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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 in 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. Backup withholding is not an additional tax. 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 the 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.

[Table of Contents](#)**“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 non-U.S. 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 non-U.S. 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 our common shares or the ADSs, including the applicability and effect of the tax laws of any state, local or foreign jurisdiction, including estate, gift and inheritance laws.

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 +1 (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 on 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.

[Table of Contents](#)**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 may use derivatives to achieve the desired ratio between floating-rate debt and fixed-rate debt, which ratio varies according to market conditions.

We are exposed to the following floating interest rates:

- U.S. dollar LIBOR, due to our floating rate U.S. dollar-denominated debt (usually trade finance related) and our cash position held offshore in U.S. dollars, which is invested in short-term instruments;
- 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, 2020* (amortization)	Notional amount	Maturities					
		2022	2023	2024	2025	2026	Thereafter
U.S. dollar LIBOR	5,502	1,627	1,516	431	291	369	1,270
U.S. dollar fixed rate	15,686	306	18	16	-	3,348	11,998
CDI	9,356	2,577	2,119	850	580	730	2,599
TJLP	802	61	69	72	72	72	456
Other	1,409	963	125	78	65	71	107

*All figures in millions of *reais*.

Our cash and cash equivalents were as follows as of the dates presented:

	December 31, 2020	December 31, 2021	Exposure
Cash in <i>reais</i> :	6,484	6,562	CDI
Cash in U.S. dollars:	3,461	9,244	LIBOR

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

As of December 31, 2021		
	Average interest rate ^(*)	Total debt (in thousands of <i>RS</i>)
US\$	5.35%	21,560,865
R\$	10.75%	10,564,312
EUR	1.47%	629,473
		32,754,650

(*) In order to determine the average interest rates for our borrowings and financing agreements with floating rates, we used rates as of December 31, 2021.

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We may conduct U.S. dollar futures operations on the B3 or over the counter 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. 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:

As of December 31, 2021				
	Functional Currency	Notional Amount (in millions of R\$)	Average Interest	Average Maturity (days)
DI future	<i>Real</i>	-	-	-
Hedge accounting of export	U.S. dollar	2,655	-	
Hedge accounting net investment	Euro	-	-	
CDI-to-U.S. dollar swap	U.S. dollar	67	-	
IPCA-to-CDI interest rate swap	<i>Real</i>	1,000	-	

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 may contract derivatives to manage certain of 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.

The following table sets forth our exposure to U.S. dollar exchange rate risk:

	As of December 31,	
	2020	2021
	(in thousands of R\$)	
U.S. dollar liabilities		
Loans and financing	4,812	3,866
Trade accounts payable	140	614
Advances from customers	-	197
Others	9	10
Total liabilities	4,961	4,687
U.S. dollar assets		
Offshore cash and cash equivalents	665	1,656
Guarantee margin	24	24
Trade accounts receivable	387	212

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Other	9	58
Total assets	1,085	1,950
Total U.S. dollar exposure	(3,876)	(2,737)
Cash flow – hedge accounting	3,992	2,655
Exchange rate swap CDI x Dollar	(67)	(67)
Total U.S. dollar net exposure	49	(149)

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.

The following table sets forth our exposure to euro exchange rate risk:

	As of December 31,	
	2020	2021
	<i>(in millions of R\$)</i>	
Euro liabilities		
Trade accounts payable	9	2
Others	1	1
Total liabilities	10	3
Euro assets		
Offshore cash and cash equivalents	13	75
Trade accounts receivable	3	5
Other	4	-
Total assets	20	80
Total euro exposure	10	77

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 are recorded 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 may contract derivatives to hedge our exposure to certain 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 16.9% from 2019 to 2021.

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, 2021, as reported by the Central Bank, as a benchmark.

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

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Currency	Exchange rate	December 31, 2021		
		Probable scenario	Scenario 1	Scenario 2
U.S. dollar to <i>real</i>	5.5805	5.0611	6.9756	8.3708
Euro to <i>real</i>	6.3210	5.7378	7.9013	9.4815
U.S. dollar to euro	1.1327	1.1337	1.4159	1.6991

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

Instruments	Notional	Risk	Probable scenario (*) RS	Scenario 1 RS	Scenario 2 RS
			<i>(in thousands of RS)</i>		
Gross exchange position	(2,737,340)	Dollar	1,421,774	(3,818,931)	(7,637,863)
Cash flow hedge accounting	2,655,350	Dollar	(1,379,189)	3,704,545	7,409,090
Exchange rate swap CDI x Dollar	(67,000)	Dollar	34,800	(93,473)	(186,947)
Net exchange position	(148,990)	Dollar	77,385	(207,859)	(415,720)
Net exchange position	77,201	Euro	(45,024)	121,997	243,994

(*) We calculated the probable scenario considering the following variations: 9.31% appreciation of the *real* against the U.S. dollar, 9.23% appreciation of the *real* against the euro and 0.09% depreciation of the euro against the U.S. dollar. Source: Central Bank as of February 22, 2022.

Sensitivity Analysis of Changes in Interest Rates

Scenarios 1 and 2 represent 25% and 50%, respectively, interest volatility growth as of December 31, 2021, and set forth below are the effects on our balance sheet:

Changes in interest rates	% p.a	Assets	Liabilities	Probable scenario*	Impact on profit or loss	
					Scenario 1	Scenario 2
CDI	9.15	3,908,490	(5,778,965)	(2,041,623)	2,084,411	(2,127,198)
TJLP	5.32		(800,884)	(843,491)	(854,143)	(864,794)
Libor	0.34		(5,449,749)	(5,468,210)	(5,472,825)	(5,477,440)

(*) This sensitivity analysis assumes a probable scenario of interest rates as of December 31, 2022, 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 recorded at fair value through profit or loss.

Item 12. Description of Securities Other Than Equity Securities**American Depositary Shares**

Citibank, N.A., with its principal executive office located at 388 Greenwich Street, New York, New York 10013, serves as the depository for the ADSs. ADR holders are required to pay various fees to the depository, and the depository 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 depository amounts in respect of expenses incurred by the depository 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.

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Depository service	Fee payable by ADR holders
Issuance and delivery of ADRs, including in connection with share distributions or stock splits	US\$2.00 for each 100 ADSs (or portion thereof)
Deposit of securities, including in respect of share, rights and other distributions	US\$2.00 for each 100 ADSs (or portion thereof)
Withdrawal of deposited securities	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, 2021, these reimbursements by the predecessor depository, J.P. Morgan Chase Bank, N.A., were approximately US\$650,000.

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, 2021, 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.

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, 2021.

[Table of Contents](#)**Attestation Report of the Independent Registered Public Accounting Firm**

Grant Thornton Auditores Independentes, our independent registered public accounting firm, audited, as of December 31, 2021, our internal control over financial reporting. For Grant Thornton Auditores Independentes' report dated May 17, 2022, see our audited consolidated financial statements included elsewhere in this annual report.

Changes in Internal Control over Financial Reporting

In the year ended December 31, 2021, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16. Reserved**16A. Audit Committee Financial Expert**

Our audit committee comprises three members and each of them satisfies the audit committee membership independence requirements set forth by the SEC, the NYSE and Brazilian Corporate Law. 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.

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 last updated in 2016 and copies are distributed to each employee of the organization, to the members of our board of directors and or our audit committee, and each signs 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 2021. 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.

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, 2020 and 2021, Grant Thornton Auditores Independentes acted as our independent auditor.

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

	Year ended December 31,	
	2020	2021
	<i>(in thousands of R\$)</i>	
Audit fees	6,745	12,267
Audit-related fees	650	1,793
Tax fees	-	-
Total	<u>7,395</u>	<u>14,060</u>

Audit Fees

Audit fees in 2020 and 2021 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.

[Table of Contents](#)**Audit-Related Fees**

In 2020 and 2021, 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 our 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 2020 and 2021, there were no fees for tax services provided by our independent auditors.

16D. Exemptions from the Listing Standards for Audit Committees

Not applicable. For a discussion on our audit committee, see "Item 6. Directors, Senior Management and Employees—6C. Board Practices—Audit Committee."

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

On June 21, 2021, we announced a share repurchase program for up to 24,154,500 of our outstanding common shares, which program terminated in December 2021, followed by an additional share repurchase program announced on December 6, 2021 for up to 30,000,000 of our outstanding common shares, which program will terminate in June 2022.

As of December 31, 2021, we held 45,790,000 of our common shares in treasury. The following table sets forth certain information regarding these share repurchase programs:

<u>Program Period</u>	<u>Shares Approved</u>	<u>Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Shares Cancelled</u>	<u>Shares Sold</u>	<u>Shares that May Yet Be Purchased</u>
June 21 – December 6, 2021	24,154,500	24,082,000	21.82	-	-	-
December 7, 2021 – June 30, 2022	30,000,000	14,298,500	24.70	-	-	15,701,500

16F. Change in Registrant's Certifying Accountant

Not applicable.

16G. Corporate Governance**Significant Differences between our Corporate Governance Practices 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 applicable 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, duties and responsibilities of, as well as the restrictions applicable to, a company's executive officers and directors. While our directors meet the

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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 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, although they may do so and then report to the entire board of directors the topics discussed and their suggestions.

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 corporate governance committee.

Compensation Committee

NYSE rules require that listed companies have a compensation committee composed entirely of independent directors and governed by a written charter addressing the committee's required purpose and detailing its required responsibilities, which include, among others, reviewing corporate goals relevant to the chief executive officer's compensation, evaluating the chief executive officer's performance, approving the chief executive officer's compensation levels and recommending to the board non-chief executive officer compensation, incentive compensation and equity-based plans. We are not required under applicable Brazilian law to have, and currently do not have, a compensation committee. Under Brazilian Corporate Law, the total amount available for compensation of our directors and executive officers and for profit-sharing payments to our executive officers is established by our shareholders at the annual shareholders' meeting. The board of directors is then responsible for determining the individual compensation and profit-sharing of each executive officer, as well as the compensation of our board and committee members.

Audit Committee

NYSE rules require that listed companies have an audit committee that (i) is composed of a minimum of three independent directors who are all financially literate, (ii) meets the SEC rules regarding audit committees for listed companies, (iii) has at least one member who has accounting or financial management expertise and (iv) is governed by a written charter addressing the committee's required purpose and detailing its required responsibilities. However, as a foreign private issuer, we need only to comply with the requirement that the audit committee meet the SEC rules regarding audit committees for listed companies to the extent compatible with Brazilian Corporate Law.

We have established an audit committee, which 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 Mr. Yoshiaki Nakano, Mr. Antonio Bernardo Vieira Maia and Mr. Miguel Ethel Sobrinho. Our audit committee may be assisted by an external consultant, whenever necessary, that renders financial and consulting services, among others. Each of the members of our audit committee satisfies 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

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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—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. 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 “—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:

- an insider trading policy for securities issued by us;
- a policy for the disclosure of material facts; and
- a sustainability policy.

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 U.S. Federal Mine Safety and Health Act of 1977 or the U.S. Mine Safety and Health Administration.

Item 17. Financial Statements

See “Item 18. Financial Statements.”

PART III**Item 18. Financial Statements**

See our audited consolidated financial statements, together with the report of Grant Thornton Auditores Independentes thereon, beginning on Page F-1 of this annual report.

Item 19. Exhibits

Exhibit Number	Description
1.1	Bylaws of the registrant (English translation), incorporated in this annual report by reference from our Form 6-K filed with the SEC on November 27, 2017.
2.1	Amended and Restated Deposit Agreement, among Companhia Siderúrgica Nacional, Citibank, N.A., as depository, and the holders and beneficial owners of American Depositary Shares issued thereunder, incorporated in this annual report by reference from our Registration Statement on Form F-6 filed with the SEC on February 24, 2022.
2.2	Description of the registrant’s securities registered under Section 12 of the Exchange Act, incorporated in this annual report by reference from our Annual Report on Form 20-F for the year ended December 31, 2019, filed with the SEC on April 3, 2020.
4.1 *	Investment Agreement, dated November 21, 2014, among Companhia Siderúrgica Nacional, Brazil Japan Iron Ore Corporation, POSCO, China Steel Corporation, Congonhas Minérios S.A. and Nacional Minérios S.A., as amended on November 15, 2015 and restated on November 27, 2015, incorporated in this annual report by reference from our Annual Report on Form 20-F for the year ended December 31, 2020, filed with the SEC on April 13, 2021.

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4.2		Amendment, dated December 6, 2019, among Companhia Siderúrgica Nacional, Japão Brasil Minério de Ferro Participações Ltda., POSCO, China Steel Corporation and CSN Minérios Nacional S.A., to the Investment Agreement (Exhibit 4.1), incorporated in this annual report by reference from our Annual Report on Form 20-F for the year ended December 31, 2020, filed with the SEC on April 13, 2021.
8.1	±	List of subsidiaries.
12.1	+	Section 302 Certification of Chief Executive Officer.
12.2	+	Section 302 Certification of Chief Financial Officer.
13.1	+	Section 906 Certification of Chief Executive Officer.
13.2	+	Section 906 Certification of Chief Financial Officer.
96.1	+	Technical Report Summary for Arcos Operations.
96.2	+	Technical Report Summary for Sergipe, Pará, Ceará and Paraná Operations.
96.3	+	Technical Report Summary for Casa de Pedra Operations.
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 confidential portions of the exhibit have been omitted from the public filing.
 † Filed herewith.

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SIGNATURES

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.

COMPANHIA SIDERÚRGICA NACIONAL

By: /s/ Benjamin Steinbruch
Name: Benjamin Steinbruch
Title: Chief Executive Officer

By: /s/ Marcelo Cunha Ribeiro
Name: Marcelo Cunha Ribeiro
Title: Chief Financial Officer and Investor Relations Officer

Dated: May 17, 2022

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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
Companhia Siderúrgica Nacional

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Companhia Siderúrgica Nacional and subsidiaries (the "Company") as of December 31, 2021, 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, 2021, 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, 2021, and our report dated May 17, 2022 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

May 17, 2022

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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, 2021 and 2020, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, 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, 2021, 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 on May 17, 2022 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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Recoverable value of the investment in jointly controlled subsidiary (Note nº 11.e)

As described further in note nº 11.e to the financial statements, the Company has an investment in jointly controlled subsidiary Transnordestina Logística S.A. ("TLISA") as of December 31, 2021, including gain on loss of control, in the amount of R\$1,385 million, whose recoverable value should be tested for impairment annually. The Company, as an investor, conducts its evaluation of fair value in accordance with IAS 36 – *Impairment of Assets*, under a method that considers the investee's capacity to distribute dividends, named Dividend Discount Model, which considers the flow of dividends discounted at present value using the equity capital in addition to other metrics and risks factors that increase the discount rate used.

The principal considerations for our determination that the recoverable value of the investment in jointly controlled subsidiary is a critical audit matter is due to the uncertainty inherent in the process of determining the estimates and judgments involved in preparing future cash flows discounted to present value, such as projections of market demand, operating margins and discount rates that may significantly change the expected realization of the asset.

Our audit procedures related to the recoverable value of the investment in jointly controlled subsidiary included the following, among others:

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- Evaluating and testing the design and operating effectiveness of the internal control framework implemented by Management related to impairment testing;
- Utilizing an internal specialist to evaluate the reasonableness of the model and certain significant assumptions used in Management's assessment;
- Evaluating the assumptions used by Management to identify assumptions that are not consistent and/or reasonable.

Ability of the jointly-controlled subsidiary to obtain the necessary funds

As discussed in Note n° 11.e. 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 in the concession agreement are still under discussion with 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. TLSA Management plans in regard to these matters are also described in Note n° 11.e. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Grant Thornton Auditores Independentes

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

São Paulo, Brazil

May 17, 2022

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Companhia Siderúrgica Nacional S.A. and Subsidiaries
Consolidated Balance Sheets as of December 31
(Thousands of Brazilian Reals)

	Note	2021	Consolidated 2020
Assets			
CURRENT ASSETS			
Cash and cash equivalents	5	16,646,480	9,944,586
Financial Investments	6	2,644,732	3,783,362
Trade receivables	7	2,597,838	2,867,352
Inventories	8	10,943,835	4,817,586
Recoverable taxes	9	1,655,349	1,605,494
Other current assets	10	484,120	367,814
Total current assets		34,972,354	23,386,194
NONCURRENT ASSETS			
Financial Investments	6	147,671	123,409
Deferred taxes	19	5,072,092	3,874,946
Inventories	8	656,193	347,304
Recoverable taxes	9	965,026	938,452
Other non current assets	10	4,365,755	3,603,047
Total		11,206,737	8,887,158
Investments	11	4,011,828	3,695,780
Property, plant and equipment	12	21,531,134	19,716,223
Intangible assets	13	7,657,050	7,316,794
Total noncurrent assets		44,406,749	39,615,955
TOTAL ASSETS		79,379,103	63,002,149

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



Companhia Siderúrgica Nacional S.A. and Subsidiaries
Consolidated Balance Sheets as of December 31
(Thousands of Brazilian Reals)

	Note	2021	Consolidated 2020
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES			
Borrowings and financing	14	5,486,859	4,126,453
Payroll and related taxes		328,443	282,630
Trade payables	18	6,446,999	4,819,539
Taxes payable		3,308,614	2,058,362
Provisions for tax, social security, labor and civil risks	21	66,047	81,073
Advances from customers	16	2,140,783	1,100,772
Proposed dividends and interest equity	16	1,206,870	946,133
Other payables	16	5,557,001	1,310,734
Total current liabilities		24,541,616	14,725,696
NONCURRENT LIABILITIES			
Borrowings and financing	14	27,020,663	31,144,200
Deferred income taxes	19	503,081	618,836
Provisions for tax, social security, labor and civil risks	21	508,305	554,315
Pension and healthcare plan	31	584,288	758,426
Provision for environmental liabilities and decommissioning of assets	22	898,597	803,835
Other payables	16	1,948,164	3,145,336
Total non current liabilities		31,463,098	37,024,948
Shareholders' equity			
Paid-in capital	24	10,240,000	6,040,000
Capital reserves		32,720	32,720
Legal reserves		1,081,222	468,291
Earnings reserves		9,948,596	5,414,323
Treasury Shares		(936,930)	(58,264)
Other comprehensive income		(50,610)	(1,983,619)
Total equity attributable to owners of the Company		20,314,998	9,913,451
Non-controlling interests		3,059,391	1,338,054
Total Shareholders' equity		23,374,389	11,251,505
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		79,379,103	63,002,149

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



Companhia Siderúrgica Nacional and Subsidiaries
Consolidated Statements of Income for the years ended December 31
Thousands of Brazilian Reals, except for the earnings (loss) per common share

	Note	2021	2020	Consolidated 2019
Net Revenue from sales	26	47,912,039	30,064,020	25,436,417
Cost of sales	27	(25,837,475)	(19,124,901)	(17,263,264)
Gross profit		22,074,564	10,939,119	8,173,153
Operating income (expenses)		(1,534,602)	(5,224,682)	(4,631,236)
Selling expenses	27	(2,372,298)	(2,004,417)	(2,342,805)
General and administrative expenses	27	(587,148)	(504,458)	(511,065)
Equity in results of affiliated companies	11.b	182,504	71,755	125,715
Other operating income	28	2,958,372	482,494	503,770
Other operating expenses	28	(1,716,032)	(3,270,056)	(2,406,851)
Profit before financial results and income taxes		20,539,962	5,714,437	3,541,917
Financial income	29	1,167,184	1,802,728	379,042
Financial expenses	29	(3,111,368)	(2,599,039)	(2,510,226)
Profit before income taxes		18,595,778	4,918,126	1,410,733
Income tax and social contribution	19	(5,000,157)	(625,508)	833,778
Net income for the year		13,595,621	4,292,618	2,244,511
Net income for the year attributed to:				
Controlling interests		12,258,628	3,794,295	1,789,067
Non-controlling interests		1,336,993	498,323	455,444
Basic earnings per share	24.f	8.90654	2.74926	1.29632
Diluted earnings per share		8.90654	2.74926	1.29632

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



Companhia Siderúrgica Nacional and Subsidiaries
Consolidated Statements of Comprehensive Income for the years ended December 31
Thousands of Brazilian Reals

	2021	2020	Consolidated 2019
Net income for the year	13,595,621	4,292,618	2,244,511
Items that will not be subsequently reclassified to the statement of income			
Actuarial (losses)/gains on defined benefit plan from investments in subsidiaries	698	879	424
Actuarial (losses)/gains on defined benefit pension plan	300,455	132,059	(113,518)
Total Items that will not be subsequently reclassified to the statement of income	301,153	132,938	(113,094)
Items that could be subsequently reclassified to the statement of income			
Cumulative translation adjustments for the year	(8,097)	581,175	32,922
(Loss)/gain on change in percentage of investments		6,102	(2,288)
(Loss)/gain on net investment hedge in foreign subsidiaries		(4,824)	2,472
(Loss)/gain cash flow hedge accounting, net of taxes	795,923	(5,537,174)	(604,828)
Cash flow hedge accounting reclassified to income upon realization, net of taxes	525,290	1,667,886	790,353
Cash flow hedge accounting - "Platts" reclassified to income upon realization, net of taxes	18,300	186,878	
(Loss)/gain cash flow hedge accounting - "Platts"	(17,755)	(187,423)	
Treasury shares acquired by reflex subsidiary	(651,016)		
Total Items that could be subsequently reclassified to the statement of income	662,645	(3,287,380)	218,631
Other comprehensive income	963,798	(3,154,442)	105,537
Comprehensive income for the year	14,559,419	1,138,176	2,350,048
Attributable to:			
Attributed to owners of the Company	13,364,223	640,052	1,894,503
Attributed to non-controlling interests	1,195,196	498,124	455,545
total	14,559,419	1,138,176	2,350,048

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

Companhia Siderúrgica Nacional and Subsidiaries

 Consolidated Statements of Cash Flows for the years ended December 31
 (Thousands of Brazilian Reals)

		2021	2020	2019
Net income for the year		13,595,621	4,292,618	2,244,511
Adjustments to reconcile net income to net cash provided by operations:				
Accrued charges on borrowings and financing	29	2,053,547	1,909,546	1,879,116
Charges on loans and financing granted	29	(61,632)	(32,684)	(58,728)
Depreciation/ depletion / amortization	27	2,218,192	2,522,063	1,519,331
Equity in results of affiliated companies	11	(182,504)	(71,755)	(125,715)
Charges on lease liabilities	17	62,470	54,236	52,607
Deferred income tax and social contribution	19	759,355	(1,426,696)	(2,398,400)
Provision for tax, social security, labor and civil risks		(61,404)	4,405	(164,223)
Monetary variations and exchange differences		1,039,420	2,010,056	853,449
Contractual agreement				(131,817)
Proceeds from disposal of fixed and intangible assets	11.i, 12 and 13	74,260	12,998	114,603
Provision (Reversal) for consumption and services PIS and COFINS credits		41,450	(29,057)	(130,339)
Provision for environmental liabilities and decommissioning of assets		92,406	10,388	17,110
Updated shares – Fair value through profit or loss (VJR)	28 and 29	11,293	(1,203,068)	118,780
Receivables by indemnity		(17,713)	(517,183)	
Net gains on the sale of the shares of Usiminas	15	(505,844)		
Net gains on the sale of the shares of CSN Mineração	11.c	(2,472,497)		
Dividends USIMINAS		(196,838)	(3,989)	(29,451)
Other provisions		(18,369)	(27,681)	114,126
Total Adjustments to reconcile net income (loss) to net cash provided by operations		16,431,213	7,504,197	3,714,351
Changes in assets and liabilities				
Trade receivables - third parties		1,233,727	(594,731)	49,338
Trade receivables - related parties		(23,220)	49,412	(77,271)
Inventories		(6,352,079)	755,571	(218,242)
Receivables from related parties/Dividends		206,475	90,306	99,276
Recoverable taxes		(65,161)	865,984	14,051
Judicial deposits		(14,688)	50,028	19,312
Trade payables		1,173,033	2,103,283	(354,288)
Trade payables – Forfeiting and Drawee risk		3,816,106	(497,451)	1,055,546
Payroll and related taxes		46,653	(43,649)	36,271
Taxes in installments		1,221,191	1,654,135	280,413
Payables to related parties		(28,909)	12,019	1,956
Advance from customer		(697,137)	(10,011)	2,524,826
Interest paid	14.a	(2,137,782)	(1,922,130)	(2,039,112)
Cash flow hedge accounting paid		(12,573)	(299,585)	
Other		(3,586)	(140,504)	(234,548)
Increase (Decrease) in assets and liabilities		(1,637,950)	2,072,677	1,157,528
Net cash generated by operating activities		14,793,263	9,576,874	4,871,879
Investments / acquisition of shares		(296,357)	(132,197)	(210,062)

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Purchase of property, plant and equipment	11.i, 12 and 13	(2,864,707)	(1,683,839)	(2,215,883)
Loans granted to related parties		(123,656)	(101,631)	(101,913)
Loans received from related parties			14,584	23,623
Financial investment, net of redeemed amount		1,504,770	39,428	289,213
Cash used to acquire interest in CBSI				(21,345)
Net cash received from sale of CSN Mineração's shares	11.c	3,164,612		
Cash on Elizabeth's consolidation	4	54,768		
Deposit in guarantee for the acquisition of LafargeHolcim		(263,750)		
Price paid in investments of Elizabeth's	4	(727,752)		
Net cash used in (generated by) investing activities		447,928	(1,863,655)	(2,236,367)
Borrowings and financing raised	14.a	12,845,544	8,085,902	10,068,627
Cost of borrowing		(162,852)	(39,174)	(67,362)
Payment of borrowings	14.a	(17,639,178)	(6,448,658)	(11,775,093)
Amortization of leases	17	(114,303)	(103,648)	(94,727)
Payment of dividends and interests on shareholder's equity		(3,290,544)	(309,350)	(1,920,309)
Issuance of new CSN Mineração's shares	11.c	1,347,862		
Share repurchase		(1,516,388)		
Net cash used in (generated by) financing activities		(8,529,859)	1,185,072	(3,788,864)
Exchange rate changes on cash and cash equivalents of foreign subsidiaries		(9,438)	(42,660)	(5,697)
Increase (Decrease) in cash and cash equivalents		6,701,894	8,855,631	(1,159,049)
Cash and cash equivalents at the beginning of the year		9,944,586	1,088,955	2,248,004
Cash and cash equivalents at the end of the year	4	16,646,480	9,944,586	1,088,955

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- Controlling interests	Cor I
Balances at December 31, 2018	4,540,000	32,720	3,064,827		1,065,188	8,702,735	1,310,705	1
Capital transactions with shareholders				(422,694)		(422,694)	(578,862)	(
Dividends				(424,903)		(424,903)	(513,842)	(
Interest on equity							(65)	
Reversal by prescription of dividends and interest on shareholder's equity				2,209		2,209		
Total comprehensive income				1,789,067	105,436	1,894,503	455,545	
Profit/(loss) for the year				1,789,067		1,789,067	455,444	
Other comprehensive income					105,436	105,436	101	
Cumulative translation adjustments for the year					32,922	32,922		
Actuarial gain/(loss) on defined benefit pension plan, net of taxes					(113,195)	(113,195)	(193)	
(Loss) / gain on the percentage change in investments					(2,288)	(2,288)	294	
Gain/(loss) on cash flow hedge accounting, net of taxes					185,525	185,525		
Gain/(loss) on hedge of net investments in foreign subsidiaries					2,472	2,472		
Internal changes in shareholders' equity			1,366,373	(1,366,373)				
Constitution of reserves			1,366,373	(1,366,373)				
Balances at December 31, 2019	4,540,000	32,720	4,431,200		1,170,624	10,174,544	1,187,388	1
Capital transactions with shareholders	1,500,000		(1,500,000)			(901,145)	(347,458)	(
Proposed capital increase	1,500,000		(1,500,000)					
Dividends				(901,145)		(901,145)	(296,936)	(
Interest on equity							(50,522)	
Total comprehensive income				3,794,295	(3,154,243)	640,052	498,124	
Profit/(loss) for the year				3,794,295		3,794,295	498,323	
Other comprehensive income					(3,154,243)	(3,154,243)	(199)	(
Cumulative translation adjustments for the year					581,175	581,175		
Actuarial gain/(loss) on defined benefit pension plan, net of taxes					133,069	133,069	(131)	
(Loss) / gain on the percentage change in investments					6,102	6,102		

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Gain/(loss) on cash flow hedge accounting, net of taxes				(3,869,765)	(3,869,765)	(68)	(3,869,765)
Gain/(loss) on hedge of net investments in foreign subsidiaries				(4,824)	(4,824)		(4,824)
Internal changes in shareholders' equity							
Constitution of reserves			2,893,150	(2,893,150)			
Balances at December 31, 2020	6,040,000	32,720	5,824,350	(1,983,619)	9,913,451	1,338,054	11,251,196
Capital transactions with shareholders							
Proposed capital increase	4,200,000		(5,078,666)	(2,911,424)	827,414	(2,962,676)	526,141
Treasury shares acquired			(878,666)			(878,666)	(878,666)
Dividends				(2,654,471)		(2,654,471)	(598,095)
Interest on equity				(256,953)		(256,953)	(95,895)
Net gain of transaction primary and secondary distribution shares of CSN Mineração					829,486	829,486	923,159
(Loss)/gain on the percentage change in investments					(2,072)	(2,072)	2,072
Total comprehensive income				12,258,628	1,105,595	13,364,223	1,195,196
Profit/(loss) for the year				12,258,628		12,258,628	1,336,993
Other comprehensive income					1,105,595	1,105,595	(141,797)
Cumulative translation adjustments for the year					(8,097)	(8,097)	(8,097)
Actuarial gain/(loss) on defined benefit pension plan, net of taxes					301,379	301,379	(226)
Gain/(loss) on cash flow hedge accounting, net of taxes					1,321,690	1,321,690	68
Treasury shares acquired by subsidiary					(509,377)	(509,377)	(141,639)
Internal changes in shareholders' equity			9,347,204	(9,347,204)			
Constitution of reserves			9,347,204	(9,347,204)			
Balances at December 31, 2021	10,240,000	32,720	10,092,888	(50,610)	20,314,998	3,059,391	23,374,389

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



1. DESCRIPTION OF BUSINESS

Companhia Siderúrgica Nacional "CSN", also referred to as "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).

The Group's main operating activities are divided into five (5) 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 all operations related to the production, distribution and sale of flat steel, long steel, metallic containers, and galvanized steel. In addition to the facilities in Brazil, CSN has commercial operations in the United States and operations in Portugal and Germany to achieve markets and providing excellent services for final consumers. Its steel is used in home appliances, civil construction, and automobile industries.

· **Mining:**

The production of iron ore is developed in the cities of Congonhas, Ouro Preto and Belo Vale, State of Minas Gerais – by subsidiary CSN Mineração.

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 carried out through the Terminal de Carvão e Minérios from the Itaguaí Port– ("TECAR"), a solid bulk terminal, one of the four terminals that comprise the Itaguaí Port, located in the State of Rio de Janeiro. Imports of coal and coke are also carried out through this terminal by provision of services by CSN Mineração to CSN. The Company's mining activities also comprises of tin exploitation, which is based in the State of Rondônia, to supply the needs of UPV. The excess of raw material is sold to subsidiaries and third parties.

As a pioneer in the use of technologies that result in the possibility of stacking the tailings generated in the iron ore production process, the Company has had its iron ore production since January 2020, 100% independent of tailings dams. After significant investments in recent years to raise the level of reliability, mischaracterization and dry stacking, the Company has moved on to a scenario in which 100% of its waste goes through a dry filtration process and is disposed of in geotechnically controlled batteries, areas exclusively destined for stacking. Approximately R\$250 million were invested in the two tailings filtration plants that have a combined total filtration capacity of 9 million tons per year.

Because of these measures, the decommissioning of the dams is the natural way of processing dry waste.

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

· **Cements**

CSN entered the cement production market in 2009, catapulted by the synergy between this activity and CSN's current business. Beside the UPV facilities, in Volta Redonda / RJ, the Company installed a new business unit, which produces CP-III type cement using the slag produced by the UPV's own blast furnaces. It also explores limestone and dolomite at the Arcos / MG unit, to meet the needs of the UPV and the cement plant. Additionally, in Arcos / MG, the clinker production operation is located. As a result, the Company is self-sufficient in the production of cement, with an installed capacity of 4.7 million tons per year.



On January 31, 2021, the Company concluded the drop down of the cement segment and, accordingly, all assets and liabilities related to the cement business were transferred from CSN to its subsidiary recently incorporated CSN Cimentos S.A. ("CSN Cimentos") see the note 11.c.

On August 31, 2021, the Company completed the acquisition of control of Elizabeth Cimentos S.A. ("Elizabeth Cimentos") and Elizabeth Mineração S.A. ("Elizabeth Mineração"), with operations in the Northeast region, especially in Paraíba and Pernambuco, under the terms of the Investment Agreement, Purchase and Sale of Quotas, Shares and Other Covenants entered into on June 29, 2021, as detailed in note 4 - Business Combination. With the closing of this transaction, CSN Cimentos now has a total capacity of 6 million tons per year.

On September 9, 2021, a Purchase and Sale Agreement was signed for the acquisition of 100% of LafargeHolcim's operations in Brazil. With the closing of the transaction, CSN Cimentos will have a total capacity of 16.3 million tons per year. The deal was valued at US\$1.025 billion, and the closing of the operation, which involves cash payment, is subject to approval by the competition authority. On the same date, the Company deposited in an Escrow Account with Banco Santander, the amount of US\$50 million, equivalent to R\$263.7 million, as part of the negotiations for the acquisition of LafargeHolcim.

· **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 the latter two hold the concession to operate the former Northeast Railway System of RFFSA, in the States of Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas and Sergipe, with TLSA being responsible for the rail links of Eliseu Martins – Trindade, Trindade – Salgueiro, Salgueiro – Porto Suape, Salgueiro – Missão Velha and Missão Velha - Pecém (Railway System II), under construction, and FTL being responsible for the rail links of São Luis - Altos, Altos - Fortaleza, Fortaleza – Souza, Souza- Recife/Jorge Lins, Recife/Jorge Lins – Salgueiro, Jorge Lins – Propriá, Paula Cavalcanti – Cabedelo, Itabaiana - Macau (Railway System I).

Ports:

The Company operates 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, vehicles, general cargo, among other products; and TECAR performs the operational activities of loading and unloading of solid bulk ships, storage and distribution (road and rail) of coal, coke, zinc concentrate, sulfur, iron ore and other bulk, intended for the seaborne market, 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.

· **GOING CONCERN**

The Management understands that the Company has adequate resources to continue its operations. Accordingly, the Company's financial statements for the year ended December 31, 2021, have been prepared on a basis of operational continuity.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.a) 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 Standard Board (IASB) and highlight all the relevant information at the financial statements, and only this information, which correspond to those used by the Company's management in its activities

2.b) Basis of presentation

The financial statements were prepared based on the historical cost and were adjusted to reflect: (i) the fair value measurement of certain financial assets and liabilities (including derivative instruments), as well as pension plan assets; and (ii) impairment losses.

When IFRS allows an option between cost or another measurement criterion, the cost of acquisition criterion was used.

The preparation of these financial statements requires Management to use certain accounting estimates, judgments and assumptions that affect the application of Accounting Policies and the amounts reported on the balance sheet date of assets, liabilities, income, and expenses may differ from actual future results. The assumptions used are based on history and other factors considered relevant and are reviewed by the Company's management.

The accounting policies and critical estimates, when applicable and relevant, are included in the respective explanatory notes and are consistent with the previous year presented, as shown below:

- Explanatory note 11 e - Recoverability test of investment on Transnordestina Logística SA ("TLSA");
- Explanatory note 13 a - Goodwill impairment test;
- Explanatory note 15.b - Derivative financial instruments and hedge accounting ("hedge accounting");
- Explanatory note 19 d - Deferred income and social contribution taxes: availability of future taxable income against which deductible temporary differences and tax losses can be used;
- Explanatory note 21 - Provision for tax, social security, labor, civil, environmental risks and judicial deposits;
- Explanatory note 22 - Provisions for environmental liabilities and asset retirement obligations;
- Explanatory note 31 - Employee benefits.

The consolidated financial statements were approved by Board of Directors on May 17, 2022.

2.c) Functional currency and presentation currency

The accounting records included in the financial statements of each of the Company's subsidiaries are measured using the currency of the principal of the economic environment in which each subsidiary operates ("the functional currency"). The consolidated financial statements are presented in R\$ (reais), which is the Company's functional and reporting currency.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing on the transaction or valuation dates, in which the items are remeasured. The balances of the asset and liability accounts are translated using the exchange rate on the balance sheet date. As of December 31, 2021, US\$1.00 was equivalent to R\$5.5805 (R\$5.1967 on December 31, 2020) and €1.00 was equivalent to R\$6.3210 (R\$6.3779 on December 31, 2020), according to the rates obtained from Central Bank of Brazil website

2.d) Adoption of new and revised International Financial Reporting Standards (IFRS)

During the year of 2021, the IASB issued the revision of the rules below, already in force in the year of 2021. Some accounting pronouncements that became effective as of January 1, 2021, having adopted and without impact on the Company's results and financial position were as follows:

- IFRS 16 – Leases;
- IFRS 4 - Insurance Contracts;
- IFRS 3 - Business Combination;
- IFRS 37 - Provisions, Contingent Liabilities and Contingent Assets;
- IAS 16 - Property, Plant and Equipment;

- IFRS 7 - Financial Instruments: Disclosures;
- IFRS 9 Financial Instruments

Additionally, the IASB is preparing new pronouncements and revisions of existing pronouncements, which will become effective only on January 1, 2023, as follows:

- - IAS 1 - Presentation of Financial Statements
- - IAS 8 - Accounting Policies, Estimate Change and Error Correction
- - IFRS 17 - Insurance Contracts

The Company's management is evaluating the practical impacts that such items may have on its financial statements.

3. IMPACTS OF COVID-19

The company continues to guide its employees and reinforce all the prevention measures and hygiene protocols recommended by the competent authorities.

The Company's economic activity is directly linked to the demand of steel products in the automotive, household, and civil construction sectors, as well as for iron ore, both in the domestic and international markets. Any reduction in the activity of these sectors could affect the demand and price of products and have a material impact on the Company's financial position and results.

The investment portfolio and the nature of the Company's industrial park are in a long-term nature. The long-term operational and economic context to which the Company is inserted allows greater flexibility in the strategies and plans to mitigate the risks and effects of the pandemic in its business and, consequently, ensure the maintenance of the expected recoverability of its non-financial assets, whether investments, fixed assets, and tax credits.

Since the beginning of the pandemic, the Company has not suffered significant impacts in its railway and maritime logistics. There were also no impacts in the supply of supplies that would cause interruption of the operational activities.

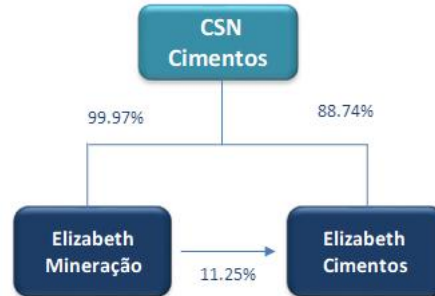
As per the guidelines of the Brazilian Securities and Exchange Commission (CVM), the Company continues to evaluate eventual effects that are related to the continuity of the business and its accounting estimates. Despite certain adverse impacts perceived in the beginning of the pandemic, which were dissipated even in 2020, those adverse impacts did not represent risks of continuity nor adjustments to accounting estimates which could produce significant effects in the Company's business and, consequently, in its financial position and results.

The Company remains with all its medium- and long-term production and sales forecasts.

4. BUSINESS COMBINATION

4.1 Acquisition of control of the companies Elizabeth Cimentos and Elizabeth Mineração.

On August 31, 2021, CSN Cimentos S.A. acquired 99.97% of the total capital stock of Elizabeth Mineração and 99.99% of the shares of Elizabeth Cimentos, with 88.746% of direct equity interest and 11.254% of indirect equity interest (through Elizabeth Mineração). The assets acquired are located in the northeast region of Brazil. Upon completion of the transaction, CSN Cimentos S.A. expects relevant operational, logistical, management and commercial synergies, a better product mix and expansion of its customers base.



a) Determination of the purchase price

In accordance with IFRS3, the purchase price is determined by the sum of the assets acquired, liabilities assumed, equity interests issued, non-controlling interest and the fair value of any interest held prior to the transaction. The table below summarizes the price considered for accounting purposes:

Item	Comment	Elizabeth Cimentos	Elizabeth Mineração	Reference
Assets transferred	A payment in the amount of R\$201 million is being carried out in the transaction.	77,768	123,947	(i)
Assets transferred	Refers to financial adjustment of working capital and debt.	(3,914)	(5,116)	(i)
Equity interests issued	Shares issued by Elizabeth Cimentos and acquired by CSN Cimentos.	526,037		(ii)
Purchase price considered for the business combination		599,891	118,831	

(i) The transaction included payments by CSN Cimentos of R\$77.7 million and R\$123.9 million on August 31, 2021 for each Elizabeth entity, and an adjustment receivable in the amount of R\$3.9 million and R\$5.1 million in December 2021 related to working capital adjustment provided for in the sale agreement.

(ii) In August 2021 the Elizabeth Cimentos performed a primary issuance of 2,382,758,512 new common shares, nominatives with no par value, which were fully acquired by CSN Cimentos.

b) Goodwill on acquisition of control of Elizabeth Cimentos and Elizabeth Mineração

In accordance with IFRS3, the acquirer shall recognize goodwill as of the acquisition date, measured by the amount the purchase price exceeds the fair value of the assets acquired and liabilities assumed (purchase price allocation). The acquisition of Elizabeth Cimentos generated goodwill for expected future profitability of R\$83.266, as shown in the table below.



Item	Reference	Elizabeth Cimentos	Elizabeth Mineração
Purchase price considered	item (i) and (ii)	599,891	118,831
Fair value of the assets and liabilities acquired		516,625	118,831
Goodwill for future profitability expected		83,266	

The goodwill is recorded under intangible assets and, since it does not have a determinable useful life, it is not amortized in accordance with IAS38. As from the year 2022, CSN Cimentos will perform the recoverability test for this asset in accordance with the requirements of IAS36.

In the acquisition of Elizabeth Mineração, the price paid was fully allocated to the assets acquired, with no goodwill generated.

(i) Fair value of assets acquired and liabilities assumed

The following table shows the fair value allocation of the assets acquired and liabilities assumed on August 31, 2021, considering the direct and indirect interests, calculated based on independent appraisers' reports.

	Elizabeth Cimentos			Elizabeth Mineração		
	Carrying amounts	Fair value adjustments	Total fair value	Carrying amounts	Fair value adjustments	Total fair value
Cash and cash equivalents	52,570		52,570	2,197		2,197
Trade receivables	27,571		27,571	1,027		1,027
Receivables from related parties	96,374		96,374	9,035		9,035
Inventories	44,157		44,157	1,017		1,017
Recoverable taxes	18,616		18,616	931		931
Short-term investments	14,689		14,689			
Other assets	17,734		17,734	673		673
Investment				40,653	24,845	65,498
Property, plant and equipment	373,574	161,367	534,941	15,092	77,089	92,181
Intangible assets	798	59,456	60,254	500	269,385	269,885
Total assets acquired	646,083	220,823	866,906	71,125	371,319	442,444
Borrowings and financing	198,778		198,778	182,402		182,402
Trade payables	22,735		22,735	446		446
Taxes payable	19,202		19,202	37,158		37,158
Debits with related parties				96,350		96,350
Other payables	44,052		44,052	7,257		7,257
Total liabilities assumed	284,767		284,767	323,613		323,613
Net equity acquired	361,316	220,823	582,139	(252,488)	371,319	118,831
Indirect investment	(40,663)	(24,851)	(65,514)			
Net equity acquired	320,653	195,972	516,625	(252,488)	371,319	118,831

The fair value allocation resulted in a total gain of R\$567.3 million, distributed among Elizabeth Cimentos and Elizabeth Mineração's main assets. The following table shows the composition of the allocated amounts and a summary of its measurement methodology.

Assets acquired	Valuation method	Carrying amounts	Fair value adjustment	Total fair value
Property, plant and equipment	Valued using the "MARKET APPROACH" method, where the fair value of the asset is estimated by comparing it with similar or comparable assets that have been sold or listed for sale in the primary or secondary market.	388,666	238,456	627,122
Mining rights	Evaluated by the MPEEM method that measures the present value of future income to be generated during the remaining useful life of a given asset. Using the analysis of the company's projected results as a reference, the pre-tax cash flows directly attributable to the asset are calculated, as of the base date stipulated in the evaluation.	500	269,385	269,885
Licenses	Valued using the WITH / WITHOUT method, which estimates the intangible value by the difference between discounted cash flow models with and without the asset.	798	59,456	60,254
		389,964	567,297	957,261

The subsidiary CSN Cimentos S.A. has hired an independent appraiser to prepare an appraisal report of the tangible and intangible assets and allocation of the excess price paid. As provided for in IFRS3, the Company has up to 12 months to adjust the measurement of amounts, due to unknown events at the acquisition date. After the conclusion of the appraisal report, the Company reclassified the amount of R\$27,667 from goodwill to fair value the licenses and mining rights.

5. CASH AND CASH EQUIVALENTS

	12/31/2021	Consolidated 12/31/2020
Cash and banks		
In Brazil	68,638	245,185
Abroad	10,007,399	3,899,282
	10,076,037	4,144,467
Investments		
In Brazil	6,493,832	5,800,119
Abroad	76,611	
Total short-term investments	6,570,443	5,800,119
Cash and cash equivalents	16,646,480	9,944,586

Our investments are basically in private and public securities with yields linked to the variation of Interbank Deposit Certificates (CDI) and repo operations backed by National Treasury Notes respectively. The Company invests part of the funds through exclusive investment funds which have been consolidated in these financial statements.

Our investments abroad are in private securities in top-rated banks and are remunerated at pre-fixed rates.

Accounting Policy

Cash and cash equivalents include cash, bank deposits and other short-term investments of immediate liquidity, redeemable within 90 days of the contracting date, readily convertible into an amount known as cash and with an insignificant risk of changing its market value.



6. FINANCIAL INVESTMENTS

	Current		Non-current		Consolidated
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	
Investments ⁽¹⁾	261,673	478,253	15,148		
Usiminas shares ⁽²⁾	2,383,059	3,305,109			
Bonds ⁽³⁾			132,523		123,409
	2,644,732	3,783,362	147,671		123,409

(1) These are restricted financial investments and linked to a Bank Deposit Certificate (CDB) to guarantee a letter of guarantee from financial institutions and financial investments in Public Securities (LFT - Letras Financeiras do Tesouro) managed by their exclusive funds.

(2) Part of the shares guarantees a portion of the Company's debt.

(3) Bonds with Fibra bank due in February 2028 (see note 23.b).

Accounting Policy

Short-term investments that are not classified as cash equivalents and are measured at amortized cost and at fair value through profit or loss.

7. TRADE RECEIVABLES

Trade receivables	Consolidated	
	12/31/2021	12/31/2020
Third parties		
Domestic market	1,218,179	910,657
Foreign market	1,472,190	2,063,867
	2,690,369	2,974,524
Allowance for doubtful debts	(236,927)	(228,348)
	2,453,442	2,746,176
Related parties (note 23 b)	144,396	121,176
	2,597,838	2,867,352

The composition of the gross balance of accounts receivable from third party customers is shown as follows:

	Consolidated	
	12/31/2021	12/31/2020
Current	2,255,200	2,537,567
Past-due up to 30 days	164,019	222,972
Past-due up to 180 days	67,822	17,915
Past-due over 180 days	203,328	196,070
	2,690,369	2,974,524

The changes in expected credit losses are as follows:

	Consolidated	
	12/31/2021	12/31/2020
Opening balance	(228,348)	(245,194)
(Loss)/Reversal estimated	1,755	7,513
Recovery and write-offs of receivables	6,287	9,333
Acquisition of Elizabeth	(16,621)	
Closing balance	(236,927)	(228,348)



Accounting Policy

Accounts receivable are initially recognized at the transaction price, provided they do not contain financing components, and subsequently measured at amortized cost. When applicable, it is adjusted to present value including the respective taxes and ancillary expenses, and customer credits, in foreign currency, are restated at the exchange rate on the date of the financial statements.

The Company measures credit losses annually expected for the instrument, where it considers all possible loss events over the life of its receivables, using a loss rate matrix by maturity range adopted by the Company, from the initial moment (recognition) of the asset. This model considers the client's history, default rate, financial situation and the position of its legal advisors to estimate expected credit losses.

The Company performs operations relating to assignment of receivables without co-obligation in which, after the assignment of duplicates / securities from the client and receipt of funds arising from the closing of each operation, CSN settles the accounts receivable and relieves itself entirely of the operation's credit risk.

8. INVENTORIES

	12/31/2021	Consolidated 12/31/2020
Finished goods	4,457,842	1,627,676
Work in progress	2,710,149	1,358,905
Raw materials	3,638,952	1,289,653
Storeroom supplies	770,296	928,158
Advances to suppliers	121,519	69,536
Provision for losses	(98,730)	(109,038)
	11,600,028	5,164,890
Classified:		
Current	10,943,835	4,817,586
Non-current ⁽¹⁾	656,193	347,304
Inventoy, net	11,600,028	5,164,890

1. Long-term iron ore inventories that will be used after the construction of the processing plant, which will produce pellet feed, in 2020, the Company defined the construction project for the new plant for processing Itabirito, which until then was considered as waste, and started to be incorporated into the long-term ore inventory.

The changes in estimated losses on inventories are as follows:

	12/31/2021	Consolidated 12/31/2020
Opening balance	(109,038)	(134,553)
(Estimated losses) / Reversal of inventories with low turnover and obsolescence	10,308	25,515
Closing balance	(98,730)	(109,038)

Accounting Policy

The inventory is recorded at the lower of cost and net realizable value. The cost is determined using the weighted average cost method for the purchase of raw materials. The cost of finished products and work in process comprises raw materials, labor, other direct costs (based on normal production capacity). The net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to realize the sales. Estimated losses on slow-moving or obsolete inventories are recognized when deemed necessary.

9. RECOVERABLE TAXES

	Consolidated	
	12/31/2021	12/31/2020
State Value-Added Tax	1,162,900	1,002,926
Brazilian federal contributions ⁽¹⁾	1,352,100	1,417,081
Other taxes	105,375	123,939
	2,620,375	2,543,946
Classified:		
Current	1,655,349	1,605,494
Non-current	965,026	938,452
Total recoverable taxes	2,620,375	2,543,946

(1) The accumulated tax credits arise basically from PIS and COFINS credits on purchases of raw materials used in production. The realization of these credits normally occurs through offsetting against domestic sales transactions and through offsetting against other federal taxes payable by the Company. As of June 2021, the Company had fully offset the PIS and COFINS credit balances referring to the period from 2001 to 2014, resulting from the exclusion of ICMS from the PIS and COFINS calculation basis, whose Injunction and Special Appeal filed in 2006, became final and unappealable on September 20, 2018.

In a judgment finalized on September 24, 2021, the Federal Supreme Court, with general repercussion, decided for the unconstitutionality of the Levy of IRPJ and CSLL on amounts of interest on arrears at the SELIC rate received because of the repetition of undue tax payment. Although the decision is still pending publication, and the Company's specific lawsuit is still pending judgment, based on its best estimate to date CSN reassessed the judgment on this lawsuit, as required by IFRIC23 and recorded a credit in the amount of R\$229 million. After the final and unappealable decision of the Company's legal action, these amounts will be considered in the tax assessments, in accordance with the Federal Tax Authorities of Brazil.

Accounting Policy

The balance of recoverable taxes maintained as current asset is expected to be offset in the next 12 months, as well as based on analysis and budget projection approved by Management. We do not foresee risks of non-realization of these tax credits.

10. OTHER CURRENT AND NON-CURRENT ASSETS

Other current and non-current assets are as follows:

	Consolidated			
	Current		Non-current	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Judicial deposits (note 21)			339,805	325,117
Prepaid expenses	225,036	136,527	74,503	115,636
Prepaid expenses with sea freight ⁽¹⁾		74,500		
Actuarial asset (note 31)			59,111	13,819
Securities held for trading (note 15 l)	12,028	5,065		
Loans with related parties (nota 15 l and 23 b)	4,511		1,143,228	966,050
Other receivables from related parties (note 23 b)	1,828	6,242	927,077	664,020
Other receivables (note 15 l)			2,345	2,445
Eletrobrás compulsory loan (note 15 l) ⁽²⁾			859,607	852,532
Dividends receivables (note 23 b)	76,878	38,088		
Employee debts	43,542	28,054		
Receivables by indemnity ⁽³⁾			534,896	517,183
Other ⁽⁴⁾	120,297	79,338	425,183	146,245
	484,120	367,814	4,365,755	3,603,047

1. Refers to payment of freight expenses and maritime insurance over performance obligations unfulfilled at the balance sheet date.

2. This is a certain and due amount, arising from the *res judicata* favorable decision to the Company, which is irreversible and irrevocable, 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. In addition to this amount already recorded, the Company continues to seek alternatives for the recovery of additional credits and the estimate can reach an amount greater than R\$350 million.

3. This is a net, certain and enforceable amount, resulting from the final and unappealable decision of the Court in favor of the Company, due to losses and damages resulting from the sinking of the voltage in the supply of energy in the periods from January / 1991 to June / 2002.

4. Non-current assets refer mainly to the deposit in an Escrow Account in the amount of US\$50 million, equivalent to R\$279 million, as part of the negotiations for the acquisition of LafargeHolcim.

11. BASIS OF CONSOLIDATION AND INVESTMENTS

The accounting policies have been consistently applied to all consolidated companies. The consolidated financial statements for the years ended December 31, 2021, and 2020 include the following direct and indirect subsidiaries, associates, joint ventures, and joint operations, as well as the exclusive funds, as follows:

Companies	Number of shares held by CSN in units	Equity interests (%)		Core business
		12/31/2021	12/31/2020	
Direct interest in subsidiaries: full consolidation				
CSN Islands VII Corp.	20,001,000	100.00	100.00	Financial transactions
CSN Inova Ventures	50,000	100.00	100.00	Equity interests and Financial transactions
CSN Islands XII Corp.	1,540	100.00	100.00	Financial transactions
CSN Steel S.L.U.	22,042,688	100.00	100.00	Equity interests and Financial transactions
TdBB S.A. (*)		100.00	100.00	Equity interests
Sepetiba Tecon S.A.	254,015,052	99.99	99.99	Port services
Minérios Nacional S.A.	141,719,295	99.99	99.99	Mining and Equity interests
Companhia Florestal do Brasil (1)	71,171,281	99.99	99.99	Reforestation
Estanho de Rondônia S.A.	195,454,162	99.99	99.99	Tin Mining
Companhia Metalúrgica Prada	555,142,354	99.99	99.99	Manufacture of containers and distribution of steel products
CSN Mineração S.A.(2)	4,374,779,493	78.24	87.52	Mining
CSN Energia S.A.	43,149	99.99	99.99	Sale of electric power
FTL - Ferrovia Transnordestina Logística S.A. (3)	510,726,198	92.71	92.38	Railroad logistics
Nordeste Logística S.A.	99,999	99.99	99.99	Port services
CSN Inova Ltd.	10,000	100.00	100.00	Advisory and implementation of new development project
CBSI - Companhia Brasileira de Serviços de Infraestrutura	4,669,986	99.99	99.99	Equity interests and product sales and iron ore
CSN Cimentos S.A.(4)	385,666,665	99.99	90.00	Manufacturing and sale of cement
Berkeley Participações e Empreendimentos S.A. (5)	1,000	100.00		Electric power generation and equity interests
CSN Inova Soluções S.A. (5)	999	99.99		Equity interests
CSN Participações I (6)	999	99.99		Equity interests
CSN Participações II (6)	999	99.99		Equity interests
CSN Participações III (6)	999	99.99		Equity interests
CSN Participações IV (6)	999	99.99		Equity interests
CSN Participações V (6)	999	99.99		Equity interests
Indirect interest in subsidiaries: full consolidation				
Lusosider Projectos Siderúrgicos S.A.		100.00	100.00	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		99.99	99.99	Sale of cans and containers in general and Equity interests
Companhia de Embalagens Metálicas MMSA		99.99	99.99	Production and sale of cans and related activities
Companhia de Embalagens Metálicas - MTM		99.99	99.99	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 Polska Sp.Z.o.o		100.00	100.00	Financial transactions, product sales and Equity interests
CSN Mining Holding, S.L		78.24	87.52	Financial transactions, product sales and Equity interests
CSN Mining GmbH		78.24	87.52	Financial transactions, product sales and Equity interests
CSN Mining Asia Limited		78.24	87.52	Commercial representation
Lusosider Ibérica S.A.		100.00	100.00	Steel, commercial and industrial activities and equity interests
CSN Mining Portugal, Unipessoal Lda.		78.24	87.52	Commercial and representation of products
Companhia Siderúrgica Nacional, LLC		100.00	100.00	Import and distribution/resale of products
CSN Cimentos S.A.(4)			10.00	Manufacturing and sale of cement
Elizabeth Cimentos S.A.(7)		99.98		Manufacturing and sale of cement
Elizabeth Mineração Ltda (7)		99.96		Mining
Direct interest in joint operations: proportionate consolidation				
Itá Energética S.A.	253,606,846	48.75	48.75	Electric power generation
Consórcio da Usina Hidrelétrica de Igarapava		17.92	17.92	Electric power consortium
Direct interest in joint ventures: equity method				
MRS Logística S.A. (8)	63,377,198	18.64	18.64	Railroad transportation
Aceros Del Orinoco S.A.		31.82	31.82	Dormant company
Transnordestina Logística S.A. (9)	24,670,093	47.26	47.26	Railroad logistics
Equimac S.A	1,395	50.00	50.00	Rental of commercial and industrial machinery and equipment
Indirect interest in joint ventures: equity method				
MRS Logística S.A. (6)		14.58	16.30	Railroad transportation
Direct interest in associates: equity method				
Arvedi Metalfer do Brasil S.A. (10)	57,224,882	20.00	20.00	Metallurgy and Equity interests
Exclusive funds: full consolidation				
Diplic II - Private credit balanced mutual fund		100.00	100.00	Investment fund
Caixa Vértice - Private credit balanced mutual fund		100.00	100.00	Investment fund
VR1 - Private credit balanced mutual fund		100.00	100.00	Investment fund
(*) Dormant companies.				

1. On November 22, 2021, a capital increase was approved for Companhia Florestal do Brasil in the total amount of R\$ 3,404, through the issuance of 4,816,890 new shares, and CSN now holds 71,171,281 common shares (in December 2020 it held 66,354,391).

2. On February 17, 2021, CSN Mineração S.A.'s shares were split, in the proportion of 1:30, and CSN now holds 4,752,584,400 shares. Subsequently, the public distribution of a percentage of these shares was approved, leading to a decrease in CSN's participation, which now holds 4,374,779,493 shares (note 11.c). On December 31, 2020, CSN held 158,419,480 shares in CSN Mineração S.A.
3. On March 23, 2021, the capital increase in FTL - Ferrovia Transnordestina Logística S.A. ("FTL") in the total amount of R\$10,860, through the issuance of 24,133,368 new shares, which were subscribed and paid up by CSN, which now holds 510,726,198 common shares. On December 31, 2020, CSN held 486,592,830 common shares of FTL.
4. On January 31, 2021, CSN subscribed shares in the capital increase of CSN Cimentos S.A., which were paid up through the transfer of assets, liabilities, property, rights and obligations that made up the activities of CSN's cement segment. As a result, the number of shares held by CSN increased, to a total of 2,956,094,581 common shares (see note 11.c). On May 14, 2021, CSN Cimentos S.A.'s shares were split into 8,868,283,73:1, and CSN now holds 333,333,333 common shares. On August 31, 2021, after approval of the capital increase in CSN Cimentos S.A., CSN now holds 368,666,665 shares. On September 9, 2021, there was a capital increase in CSN Cimentos with the issuance of new shares, thus CSN now holds 381,666,665 common shares. On November 10, 2021, upon approval of the capital increase and issuance of 4,000,000 new shares of CSN Cimentos S.A., CSN now holds 385,666,665 common shares. As of December 31, 2020, CSN held 90 shares in CSN Cimentos S.A..
5. Berkeley Participações e Empreendimentos S.A. was acquired on May 10, 2021, and Fremont Empreendimentos e Participações S.A. was acquired on June 30, 2021, under a share purchase agreement signed on that same date. On August 2, 2021, the name of Fremont Empreendimentos e Participações S.A. was changed to CSN Inova Soluções S.A.
6. On November 03, 2021, CSN together with Companhia Florestal do Brasil, established five new companies with the following corporate names: CSN Participações I, CSN Participações II, CSN Participações III, CSN Participações IV and CSN Participações V., all of which have the purpose of participating in the capital stock of other companies.
7. On August 31, 2021, the subsidiary CSN Cimentos acquired control of Elizabeth Cimentos S.A and Elizabeth Mineração Ltda. (see note 4).
8. On December 31, 2021, and December 31, 2020, the Company directly held 63,377,198 shares, of which 26,611,282 were common shares and 36,765,916 preferred shares, and its direct subsidiary CSN Mineração S.A. held 63,338,872 shares, of which 25,802,872 were common shares and 37,536,000 preferred shares, in MRS Logística S.A.
9. On December 31, 2021, and 2020, the Company held 24,670,093, of which 24,168,304 were common shares and 501,789 were Class B preferred shares, of the company Transnordestina Logística S.A.
10. On December 24, 2021, a capital increase was approved for Arvedi Metalfer Do Brasil S.A. Through the increase, CSN subscribed 8,150,000 new shares, and now holds 57,224,882 common shares. As of December 31, 2020, CSN held 49,074,882 shares of Arvedi Metalfer do Brasil S.A.

11.a) Investments in joint ventures, joint operations, associates and other investments

The number of shares, the balances of assets and liabilities, shareholders' equity and the profit / (loss) amounts for the year in those investees are as follows:

Companies	12/31/2021				12/31/2020			
	Participation in				Participation in			
	Assets	Liabilities	Shareholders' equity	Profit / (Loss) for the period	Assets	Liabilities	Shareholders' equity	Profit / (Loss) for the period
Joint-venture e Joint-operation								
MRS Logística S.A.			1,806,539	260,622	4,175,249	2,567,882	1,607,367	160,371
Fair Value - MRS Logística S.A.	5,046,851	3,240,312	410,144	(11,747)			421,888	(11,747)
CSN - Companhia Brasileira de Serviços de Infraestrutura Transnordestina Logística S.A. (*)			1,114,234	(45,870)	4,657,691	3,497,587	1,160,104	(28,952)
Fair Value (*) - Transnordestina Logística S.A.	4,885,994	3,771,760	271,116				271,116	
Equimac S.A.	20,155	11,727	8,428	(608)	7,536	301	7,235	(329)
	9,953,000	7,023,799	3,610,461	202,397	8,840,476	6,065,770	3,467,710	119,343
Associates								
Arvedi Metalfer do Brasil	46,739	25,198	21,541	3,265	40,528	32,490	8,038	(6,765)
	46,739	25,198	21,541	3,265	40,528	32,490	8,038	(6,765)
Classified at fair value through profit or loss (note 12 I)								
Panatlântica			190,321				59,879	
			190,321				59,879	
Eliminations				(41,568)				(30,856)
Other Investments								
Others			27,324	18,410			279	(9,967)
			27,324	18,410			279	(9,967)
Total Investments			3,849,647				3,535,906	
Total Equity in results of affiliated companies				182,504				71,755
Investments properties			162,181				159,874	
Total Investments			4,011,828				3,695,780	

(*) As of December 31, 2021, and December 31, 2020, the net balance of R\$271,116 refers to the Fair Value generated by the loss of control of Transnordestina Logística SA in the amount of R\$659,105 and impairment of R\$387,989.


11.b) Changes in investments in subsidiaries, jointly controlled companies, joint operations, associates, and other investments

	Consolidated	
	12/31/2021	12/31/2020
Opening balance of investments (assets)	3,535,906	3,482,974
Capital increase and (Decrease)/acquisition of shares(1)	58,178	3,400
Dividends (2)	(61,898)	(82,642)
Comprehensive income (3)	453	6,895
Update of shares measured at fair value through profit or loss (Note 15 II)	109,254	12,579
Equity in results of affiliated companies (6)	219,508	124,324
Amortization of fair value - investment MRS	(11,747)	(11,747)
Others	(7)	123
Closing balance of investments (assets)	3,849,647	3,535,906

- In January 2021 a capital increase was made in the subsidiary CSN Cimentos, resulting from the payment by CSN of net assets comprising certain assets and liabilities (see note 11.c). In 2021, through CSN Inova Ventures, strategic investments were made in startups, as follows: 2D Materials, H2Pro Ltda., 1S1 Energy, Traive INC., OICO Holdings, and Clarke Software, with total investments of US\$ 4,950, corresponding to R\$27,040. In August 2021 Panatlântica increased its capital through Profit Reserves. CSN received the bonus of shares in the amount of R\$21,187. In December 2021 there was a capital increase in Arvedi Metalfer, and on this occasion CSN subscribed and paid in the amount of R\$8,150.
- In 2021, refers mainly to dividends from the subsidiary CSN Mineração S.A. in the amount of R\$2,984,155 (R\$2,437,482 at December 31, 2020).
- Refers to the translation into the reporting currency of investments abroad whose functional currency is not the Brazilian Real, actuarial gain/(loss) and reflection and hedge of investments reflecting investments accounted for under the equity method.
- The reconciliation of the equity in earnings of companies with shared control classified as joint ventures and associates and the amount presented in the income statement is presented below and results from the elimination of the results of CSN's transactions with these companies:

	Consolidated	
	12/31/2021	12/31/2020
Equity in results of affiliated companies		
MRS Logística S.A.	260,622	160,370
Transnordestina Logística S.A.	(45,870)	(28,952)
Arvedi Metalfer do Brasil S.A.	3,265	(6,765)
Equimac S.A.	(608)	(329)
Others	2,099	
	219,508	124,324
Eliminations		
To cost of sales	(62,982)	(46,751)
To taxes	21,414	15,895
Others		
Amortized at fair value - Investment in MRS	(11,747)	(11,747)
Others	16,311	(9,966)
Equity in results	182,504	71,755

11.c) Additional information on operational subsidiaries based in Brazil and abroad

- CSN Cimentos S.A

The cement operations began in May 2009 with a crushing unit in Volta Redonda/RJ, motivated by the synergy between that activity and the generation of slag produced in our blast furnaces in the Presidente Vargas steel plant ("UPV"), a material used as raw material in the production of cement. Located within the UPV premises, in Volta Redonda/RJ, that business unit has an annual capacity of 2.4 million tons of cement type CP-III.

In 2011, our self-production of clinker was initiated after the installation of a furnace in Arcos/MG, with a daily capacity of 2,500 tons, using calcitic limestone extracted in the Bocaina mine, existing in the same location that also supplies steel limestone to UPV. The clinker produced is primarily loaded by rail to our cement plant in Volta Redonda/RJ.



In 2015, the unit in Arcos/MG started its production of cement with the installation of two vertical crushers with an annual capacity of 2.3 million tons, rising our annual installed capacity to 4.7 million tons. In 2016 a second production line of clinker was assembled, with a furnace for 6,500 tons per day reaching full independence for clinker in the production of cement.

The production in Arcos is primarily of cement type CP-II, basically composed of clinker, slag, limestone and plaster, and the composition of those materials varies depending on the intended final product. Also, in Arcos, there is extraction of limestone and dolomite destined to UPV.

After the acquisition of Elizabeth Cimentos and Elizabeth Mineração, the cement segment has a production capacity of 6.0 million tons per year. When CADE approves the acquisition of LafargeHolcim and concludes the transaction, production capacity will be 16.3 million tons per year (note 11.h).

a) Drop down - Cement

The cement activities had been carried out as a business unit of CSN and, recently, the Company chose to segregate these activities to a subsidiary called CSN Cimentos. This segregation was approved at an Extraordinary General Meeting of CSN Cimentos, held on January 31, 2021, which, among other matters, approved a capital increase in CSN Cimentos in the amount of R\$2,956,094, with the issuance of 2,956,094,491 new common shares, which were fully subscribed and paid up on the same date by the Company, upon checking of the net assets, liabilities, goods, rights and obligations related to CSN's cement segment, as described in detail in the Appraisal Report, also approved at the aforementioned meeting

Find below the breakdown of the net assets contributed:

Assets	12/31/2020		01/31/2021
	Appraisal reports		Close balance
Trade receivables		37,171	54,684
Inventories		134,309	164,460
Other assets		29,186	30,228
Property, plant and equipment		3,151,349	3,129,161
Intangible assets		8,086	8,086
Liabilities			
Trade payables		(253,186)	(278,538)
Other payables current		(42,074)	(34,301)
Lease liabilities		(42,257)	(24,430)
Other provisions		(66,490)	(64,125)
Net assets		2,956,094	2,985,225

b) Acquisition of Elizabeth Companies

On June 29, 2021, CSN Cimentos entered into an Investment Agreement for the Purchase and Sale of Quotas, Shares and Other Covenants to acquire control of Elizabeth Cimentos and Elizabeth Mineração, which had one of the most modern plants in the country, with relevant operations in the Northeast region, especially Paraíba and Pernambuco. The acquisition of the companies added a production capacity for CSN Cimentos of 1.3 million tons per year. CSN Cimentos now has a total capacity of 6.0 million tons per year. The deal was valued at R\$1.08 billion and involves cash payments, capital contributions and assumption of debt. On August 31, 2021, the acquisition was concluded (note 4).

· - ELIZABETH CIMENTOS S.A. ("Elizabeth Cimentos")

On August 31, 2021, the acquisition of control of Elizabeth Cimentos and Elizabeth Mineração, through its subsidiary CSN Cimentos, was concluded. As a result, CSN Cimentos now has a total capacity of 6 million tons per year.

Elizabeth Cimentos is incorporated as a limited liability company, which manufactures and sells Portland cement and clinker and began production activities in January 2015. Its products are marketed in all states of the North and Northeast regions.

· - ELIZABETH MINERAÇÃO LTDA. ("Elizabeth Mineração")

Elizabeth Mineração is incorporated as a limited liability company, founded in 2005, and its object is the extraction, processing, and sale of stone ores. It may also participate in other companies as a partner, shareholder, or member.

c) Cancellation of the Registration Application at CVM - CSN Cimentos

On February 15, 2022, due to adverse conditions in the domestic and international markets, the Company filed for the CVM and B3 a petition to cancel the applications for registration as a class "A" securities issuer and the public offering for primary distribution of common shares issued by CSN Cimentos, a subsidiary of the Company, filed with the CVM on May 17, 2021.

· SEPETIBA TECON SA ("Tecon")

It aims to explore Container Terminal No. 1 at the Port of Itaguaí, located in Itaguaí, in the State of Rio de Janeiro. The terminal is connected to the UPV by the Southeastern railway network, which is granted to MRS Logística SA. The services provided are handling operations and storage of containers, steel products and cargo in general, among other products and services for washing, maintenance and hygiene of containers.

Tecon won a bidding procedure and entered into the lease agreement on 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, all rights and benefits transferred to Tecon will return to the Federal Government, together with the assets owned by Tecon and those resulting from investments made by it in leased assets, declared reversible by the Federal Government as they are necessary for the continuity of the provision of the service granted. The assets declared reversible will be indemnified by the Federal Government at the residual value of their cost, determined by Tecon's accounting records after deducting depreciation.

· ESTANHO DE RONDÔNIA SA ("ERSA")

Headquartered in the state of Rondônia, the subsidiary operates two units, one in the city of Itapuã do Oeste / RO and the other in Ariquemes / RO. Mining is located in Itapuã do Oeste, where cassiterite (tin ore) is extracted, and in Ariquemes, the foundry where metallic tin is obtained, which is the raw material used at UPV for the manufacture of metal sheets.

· COMPANHIA METALÚRGICA PRADA ("Prada")

Prada operates in two segments: metal steel packaging and flat steel processing and distribution.

Packaging

In the steel metallic packaging segment, Prada produces the best and safest cans, buckets, and aerosols. It serves the chemical and food segments, providing packaging and lithography services to the main companies in the market.

Distribution

Prada also operates in the flat steel processing and distribution area, with a diversified product line. Supplies coils, rolls, plates, strips, *blanks*, metal sheets, profiles, tubes, and tiles, among other products, for the most different segments of the industry - from automotive to civil construction. It is also specialized in providing steel processing services, meeting the demand of companies from all over the country.

· CSN ENERGIA S.A. ("Energia")

Its main objective is to sell electric energy to supply the operational needs of its The Company. If there is a surplus of the acquired energy, it is sold to the market through the CCEE ("Electrical Energy Trading Chamber"). The company's head office is located in Rio de Janeiro.



· FTL - FERROVIA TRANSNORDESTINA LOGÍSTICA SA ("FTL")

Company created for the purpose of incorporating the spun-off portion of Transnordestina Logística SA. It operates public cargo transportation services in the northeast of Brazil, in the stretches between the cities of São Luís and Altos, Altos and Fortaleza, Fortaleza and Sousa, Sousa and Recife / Jorge Lins, Recife / Jorge Lins and Salgueiro, Jorge Lins and Propriá, Paula Cavalcante and Cabedelo (Branch of Cabedelo) and Itabaiana and Macau (Branch of Macau) ("Malha I").

On March 23, 2021, CSN subscribed FTL shares through the capitalization of credits arising from Advances for Future Capital Increase (AFAC) in the amount of R\$10,860, passing its interest in FTL's capital from 92.38% to 92.71%. As a result of the operations described above, which caused a change in shareholder participation, the Company recorded a loss in the amount of R\$29, recorded in shareholders' equity under "Other comprehensive income". There was no change in the corporate structure in 2021.

· CSN MINERAÇÃO SA ("CSN Mineração")

Headquartered in Congonhas, in the State of Minas Gerais, CSN Mineração SA has as its main objective the production, purchase and sale of iron ore, and has the commercialization of products in the foreign market as its focal point. As of November 30, 2015, CSN Mineração SA started to centralize CSN's mining operations, including the establishments of the Casa de Pedra mine, the TECAR port and an 18.63% stake in MRS. CSN Mineração publicly held corporation and its shares are listed on the São Paulo Stock Exchange, B3 - Brasil, Bolsa, Balcão.

CSN's stake in this subsidiary on December 31, 2021, was of 78.24% (87.52% on December 31, 2020).

Below as the main transactions occurred in the subsidiary is 2021:

a) Initial Public Offering (IPO)

On February 17, 2021, the subsidiary CSN Mineração concluded its initial public offering at B3 - Brasil, Bolsa, Balcão. The final prospectus of the public offering consisted of: (i) primary distribution of 161,189,078 shares ("Primary Offering"); and (ii) secondary distribution of 422,961,066 shares, being initially 372,749,743 shares ("Secondary Offering"), increased by 50,211,323 supplementary shares held by CSN ("Supplementary Shares").

The price per share was fixed at R\$8.50 after the collection of intention of investments collected from institutional buyers in Brasil and abroad.

Upon conclusion of the offering, the Company's interest in the subsidiary CSN Mineração changed from 87.52% to 78.24%.

i. Primary Distribution of Shares

Upon the primary distribution, CSN Mineração issued 161,189,078 shares ("Primary Offering") and capitalized the total amount of R\$1,370,107 (R\$1,347,862 net of transaction costs).

The issuance of 161,189,078 shares diluted the Company's interest in the capital of CSN Mineração and, accordingly, the Company recognized in other comprehensive income a gain from the change of ownership percentage.

The impact of the transaction is presented below:

Gain on participation in the capital increase	1,060,530
Loss due to dilution of participation with issue of new shares	(231,044)
Equity adjustment by dilution of share percentage	(7,393)
Net gain from the transaction	822,093

ii. Secondary Distribution of Shares

Upon the secondary distribution of shares, the Companhia Siderúrgica Nacional sold 327,593,584 common shares and, additionally, in March 2021 sold supplementary 50,211,323 common shares, totaling 377,804,907 or 9.3% of shares previously held, in the total amount of R\$3,211,342 (R\$3,164,612 net of transaction costs). The gain for the sale was recognized as Other Operating Income.



The main impacts of the transaction are presented as follows:

Equity in the transaction	9,947,525
Number of share before initial public offering	5,430,057,060
Cost per share	R\$ 1.83
Number of shares sold by CSN	377,804,907
Price per share	R\$ 8.50
(+) Net cash generated in the transaction	3,211,342
(-) Transaction cost	(46,730)
(=) net cash receivable (a)	3,164,612
(-) Cost of shares (b)	(692,115)
(=) Net gain from the transaction (a)+(b)	2,472,497

b) Share repurchase programs of subsidiary CSN Mineração

On March 24, 2021, and on November 3, 2021, the Board of Directors of CSN Mineração approved the Share Repurchase Plans, to remain in treasury and subsequent disposal or cancellation, pursuant to CVM Instruction 567/2015, described below. On December 31, 2021, the position of treasury shares was as follows:

Program	Board's Authorization	Authorized quantity	Program period	Average buyback price	Minimum and maximum buyback price	Sale of shares	Treasury balance in R\$
1º	3/24/2021	58,415,015	from 3/25/2021 to 9/24/2021	R\$6.1451	R\$5.5825 and R\$6.7176	52,940,500	325,324,667
2º	11/03/2021	53,000,000	from 11/04/2021 to 9/24/2022	R\$6.2076	R\$5.0392 and R\$6.1208	52,466,800	325,692,908
						105,407,300	651,017,574

· MINÉRIOS NACIONAL S.A. ("Minérios Nacional")

Headquartered in Congonhas, in the State of Minas Gerais, Minérios Nacional has as main objective the production and sale of iron ore. The subsidiary concentrates the mining rights assets related to the Fernandinho, Cayman and Pedras Pretas mines, all in Minas Gerais transferred to Minérios Nacional SA in the business combination operation that took place in 2015.

· CBSI - COMPANHIA BRASILEIRA DE INFRASTRUCTURE SERVICES ("CBSI")

Previously located in the city of Araucária-PR, CBSI is currently headquartered in the city of Volta Redonda and its main purpose is to render services to CSN, CSN's subsidiaries and third parties related to the recovery and maintenance of industrial machinery and equipment, civil maintenance, industrial cleaning, preparation product logistics, among others.

The investment is the result of a joint venture between CSN and CKTR Brasil Serviços Ltda. in 2011 which previously held a 50% stake. On November 29, 2019, the Company completed the acquisition of the remaining 50% of CBSI's shares for R\$24,000. the Company owns 100% of CBSI's capital.

Additional information on indirect investments in abroad operations

· STAHLWERK THÜRINGEN GMBH ("SWT")

The SWT was formed from the defunct Maxhütte steel industrial complex in Unterwellenborn, Germany. SWT produces used steel profiles for civil construction in accordance with international quality standards. Its main raw material is scrap steel, and its installed production capacity is 1.1 million tons of steel per year. SWT is an indirect subsidiary of CSN Steel S.L.U., a wholly owned subsidiary of CSN.



· COMPANHIA SIDERURGICA NACIONAL – LLC (“CSN LLC”)

Established in 2001 with the assets and liabilities of the former Heartland Steel Inc., CSN LLC has an industrial plant in Terre Haute, in the state of Indiana - USA, where the complex is composed of a cold rolling mill, a hot pickling line and a galvanizing line, with an installed production capacity of 800 thousand tons/year. CSN LLC is indirectly controlled by CSN Steel S.L.U., a wholly owned 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 subsequently Heartland Steel Processing, LLC. was sold to Steel Dynamics, Inc. ("SDI") for a base transaction price of \$400 million.

The new "Companhia Siderúrgica Nacional, LLC" is an importer and marketer of steel products and maintains its activities in the United States.

· LUSOSIDER AÇOS PLANOS, S.A. (“Lusosider”)

Incorporated in 1996, as a continuation of Siderúrgica Nacional - a company privatized by the Portuguese government that year, Lusosider is the only Portuguese industry in the steel sector to produce cold-rolled flat steel, with an anti-corrosion coating. Lusosider has an installed capacity of approximately 550 thousand tons/year to produce four large groups of steel products: galvanized sheet, cold-rolled sheet, pickled sheet, and oil-coated sheet. The products manufactured by Lusosider may be used in the packaging industry, civil construction (tubes and metallic structures) and in components for home appliances.

11.d) Joint ventures and joint operations financial information

The balance sheet and income statement balances of the companies whose control is shared are shown below and refer to 100% of the companies' results:

Equity interest (%)	12/31/2021				12/31/2020			
	Joint-Venture		Equimac S.A.	Joint-Operation	Joint-Venture		Equimac S.A.	Joint-Operation
	MRS Logística	Transnordestina Logística		Itá Energética	MRS Logística	Transnordestina Logística		Itá Energética
	37.27%	47.26%	50.00%	48.75%	34.94%	47.26%	50.00%	48.75%
Balance sheet								
Current Assets								
Cash and cash equivalents	1,836,612	1,259	2,077	42,500	1,206,484	1,390	1,351	48,919
Advances to suppliers	44,011	11,486	407	1,254	27,312	1,948		742
Other current assets	1,065,913	55,334	8,862	18,453	823,204	51,793	2,356	89,521
Total current assets	2,946,536	68,079	11,346	62,207	2,057,000	55,131	3,707	139,182
Noncurrent Assets								
Other non-current assets	980,861	124,776		19,578	608,878	225,492		20,807
Investments, PP&E and intangible assets	9,614,144	10,145,422	28,964	358,265	8,537,009	9,574,588	11,365	390,672
Total non-current assets	10,595,005	10,270,198	28,964	377,843	9,145,887	9,800,080	11,365	411,479
Total Assets	13,541,541	10,338,277	40,310	440,050	11,202,887	9,855,211	15,072	550,661
Current Liabilities								
Borrowings and financing	767,992	228,769	4,041		828,439	241,029		
Lease liabilities	383,323				317,526			
Other current liabilities	1,513,799	157,946	4,063	40,473	1,117,975	125,794	602	19,721
Total current liabilities	2,665,114	386,715	8,104	40,473	2,263,940	366,823	602	19,721
Noncurrent Liabilities								
Borrowings and financing	3,551,278	6,665,700	15,351		2,162,657	6,368,070		
Lease liabilities	1,718,366				1,674,594			
Other non-current liabilities	759,538	928,254		16,098	788,862	665,653		15,900
Total non-current liabilities	6,029,182	7,593,954	15,351	16,098	4,626,113	7,033,723		15,900
Shareholders' equity	4,847,245	2,357,608	16,855	383,479	4,312,834	2,454,665	14,470	515,040
Total liabilities and shareholders' equity	13,541,541	10,338,277	40,310	440,050	11,202,887	9,855,211	15,072	550,661

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Equity interest (%)	01/01/2021 a 12/31/2021				01/01/2020 a 12/31/2020					01/01/2019 a 12/31/2019		
	Joint-Venture		Joint-Operation		Joint-Venture		Joint-Operation		Joint-Venture		Joint-Operation	
	MRS Logística	Transnordestina Logística	Equimac S.A.	Itá Energética	MRS Logística	Transnordestina Logística	Equimac S.A.	Itá Energética	CBSI	MRS Logística	Transnordestina Logística	Itá Energética
	37.27%	47.26%	50.00%	48.75%	34.94%	47.26%	50.00%	48.75%	50.00%	34.94%	46.30%	48.75%
Statements of Income												
Net revenue	4,427,385	138	15,238	221,023	3,604,965	35	2,308	173,426	267,436	3,200,809		163,048
Cost of sales and services	(2,919,527)		(13,001)	(81,649)	(2,521,991)		(2,386)	(74,048)	(233,830)	(2,382,828)		(83,129)
Gross profit	1,507,858	138	2,237	139,374	1,082,974	35	(78)	99,378	33,606	817,981		79,919
Operating income (expenses)	(116,499)	(76,543)	(3,453)	(69,097)	(105,267)	(42,108)	(576)	(67,885)	(12,328)	207,840	(18,077)	(62,660)
Financial income (expenses), net	(345,513)	(20,651)		1,274	(330,756)	(19,186)	(4)	(764)	(1,460)	(268,089)	(18,386)	1,183
Income before income tax and social contribution	1,045,846	(97,056)	(1,216)	71,551	646,951	(61,259)	(658)	30,729	19,818	757,732	(36,463)	18,442
Current and deferred income tax and social contribution	(346,551)			(24,390)	(216,649)			(10,391)	(6,428)	(254,378)		(6,147)
Profit / (loss) for the year	699,295	(97,056)	(1,216)	47,161	430,302	(61,259)	(658)	20,338	13,390	503,354	(36,463)	12,295

· ITÁ ENERGÉTICA SA - ("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%.

· MRS LOGÍSTICA S.A.

Located in the city of Rio de Janeiro-RJ, the company aims to exploit, for an onerous concession, the public service of railway cargo transportation in the areas of the Southeast Network, located on the Rio de Janeiro, São Paulo, and Minas Gerais axis, previously held by the extinct Rede Ferroviária Federal SA - RFFSA. The concession has a term of 30 years from December 1, 1996, extendable for an equal period by exclusive decision of the grantor.

MRS can also explore modal transport services related to rail transport and participate in projects aimed at expanding the rail services granted.

For the provision of services, MRS leased from RFFSA, for the same period of the concession, the assets necessary for the operation and maintenance of rail freight transport activities. At the end of the concession, all leased assets will be transferred to the possession of the railway transport operator designated in that same act.

The Company directly holds an 18.64% interest in the total capital of MRS and indirectly, through its subsidiary CSN Mineração SA, a 14.58% interest in the capital of MRS, totaling a 33.22% interest.

· CONSÓRCIO DA USINA HIDRELÉTRICA DE IGARAPAVA

The Igarapava Hydroelectric Plant is located in Rio Grande, in the city of Conquista - MG, and has an installed capacity of 210 MW, formed by 5 Bulb-type generating units.

CSN holds 17.92% of the investment in the consortium, whose object is the distribution of electricity, which is distributed according to the percentage of participation of each company.

The balance of property, plant and equipment, net of depreciation on December 31, 2021, is R\$20,133 (R\$21,287 on December 31, 2020) and the expense amount in 2021 was R\$7,572 (R\$6,611 in 2020).

11.e) TRANSNORDESTINA LOGÍSTICA SA ("TLA")

It is in the pre-operational phase and should remain so until the completion of Mesh II. The approved schedule, which provided for the completion of the work for January 2017, is currently under discussion with the responsible bodies. Its Management understands that new deadlines for the completion of the project will not substantially negatively imply the expected return on investment.

Management relies on resources from its shareholders and third parties to complete the work, which it expects to be available, based on previously concluded agreements and recent discussions between the parties involved. After evaluating this matter, Management concluded that the use of the project's business continuity accounting basis in the preparation of the financial statements was considered appropriate.

Measurement of recoverable value

Cash Flow Projection	By 2057
Gross margin	Estimated based on market study to capture cargo and operating costs according to market trend studies
Cost estimate	Study-based costs and market trends
Perpetuity growth rate	Growth rate was not considered as a result of the projection model until the end of the concession.
Discount rate	Range from 5.18% to 7.50% in real terms

Additionally, the Company as an investor, carried out its impairment test of its interest in TLSA through the ability to distribute dividends by TLSA, a methodology known as the Dividend Discount Model, or DDM, to remunerate the capital invested by its shareholders. For the performance of this test, some factors were taken into account, such as:

- The dividend flow was extracted from TLSA's nominal cash flow;
- The dividend flow was calculated considering the percentages of annual participation, considering the dilutions of CSN's participation resulting from the amortization of debts;
- This dividend flow was then discounted to present value using the cost of equity (Ke) embedded in TLSA's WACC rate; and
- This extracted Ke was the one calculated in "rolling WACC" From TLSA.

Due to the sharing of investors' risks and the fact that the asset being tested represents the cash-generating unit itself, which in turn equals the legal entity, the risk determined by CSN's Management is the same as that applied by TLSA when evaluation of the investment of its own assets, with no additional risk factor to the model.

As a result of the test carried out, it was not necessary to record losses due to *impairment* of this investment for the year ended December 31, 2021.

- EQUIMAC SA

In August 2019, CSN Equipamentos SA was incorporated, which had its corporate name changed to Equimac SA ("Equimac") on June 26, 2020. Equimac is a joint venture, a partnership between Unidas Guindastes Eireli and CSN, each with a 50% stake in its share capital. Equimac is located in the city of São Paulo and its main objective is to rent commercial and industrial machinery and equipment.

11.f) Other investments

- PANATLÂNTICA SA ("Panatlântica")

Publicly held corporation headquartered in Gravataí-RS, whose purpose is the industrialization, trade, import, export and processing of steel and metals, ferrous or non-ferrous, coated or not. This investment is classified at fair value through profit or loss.

The Company currently holds 11.31% on December 31, 2021 and 2020, of Panatlântica's total share capital.

- ARVEDI METALFER DO BRASIL SA ("Arvedi")

Arvedi, headquartered in Salto, State of São Paulo, is engaged in pipe production. As of December 31, 2021 and 2020, CSN had a 20.00% interest in Arvedi's share capital.

11.g) Intention to acquire companies

In both operations below the outcome is expected to occur after approval by the Administrative Council for Economic Defense (CADE).



· **Metalgráfica**

On November 24, 2021, Companhia Siderúrgica Nacional ("CSN" or "Company") entered into a Purchase and Sale Agreement for the acquisition of Metalgráfica Iguaçú S.A. ("Metalgráfica"), whereby the parties agreed to combine the operations of both companies by means of the incorporation of all shares issued by Metalgráfica by CSN ("Operation").

The Operation to be submitted to the approval of CSN's and Metalgráfica's shareholders after CADE's approval will result in (a) the merger, by CSN, of all the shares issued by Metalgráfica, making it its wholly-owned subsidiary; and (b) in consideration for the merger of shares, the receipt by Metalgráfica's shareholders of CSN shares (to be issued in a capital increase, with a maximum dilution expectation of 0.01% of CSN's capital stock) in replacement of Metalgráfica's shares according to the exchange ratio to be approved at an extraordinary general meeting of the companies.

Founded in 1951, Metalgráfica has plants in Ponta Grossa (PR) and Goiânia (GO) and produces steel cans for the domestic and international metal food packaging markets. The operation is a strategic step to expand the production capacity of CSN's packaging division. The technology used by Metalgráfica is more modern than the one used by CSN, improving the competitiveness of the business, and strengthening the national chain, especially in relation to substitute packages.

· **LafargeHolcim**

On September 9, 2021, CSN Cimentos S.A., a non-publicly held subsidiary of CSN, and which concentrates the group's cement manufacturing and sales operations ("CSN Cimentos") entered into a stock purchase agreement through which it intends to acquire 100% (one hundred percent) of the shares issued by LafargeHolcim (Brasil) S.A. ("Business"), with the Company as guarantor of its obligations ("Operation"). The Business was valued at a base value of US\$1.025 billion, subject to price adjustment and the amount held in escrow, in addition to the other terms and conditions provided for in the respective contract, including approval by CADE. On that same date, the Company deposited in an Escrow Account the amount of US\$50 million as part of the negotiations for the acquisition of LafargeHolcim.

The acquisition of the above-mentioned company will add a production capacity to CSN Cimentos of 10.3 million tons of cement per year ("MTPA") through cement plants strategically located in the Southeast, Northeast and Midwest, in addition to substantial reserves of high-quality limestone and concrete and aggregates units. Significant operational, logistical, management and commercial synergies are expected, with room for evolution in the product mix and expansion of the customer base.

Accounting Policy

Equity method of accounting

The equity method of accounting for subsidiaries, jointly controlled and affiliated companies is applied. Other investments are held at fair value or cost.

Subsidiaries: They are entities in which the Company has significant influence over its financial and operating policies and / or potential exercisable or convertible voting rights. Subsidiaries are fully consolidated from the date on which control is transferred to the Company and cease to be consolidated on the date on which control ceases.

Jointly Controlled: are all entities in which the Company has jointly contractually controlled control with one or more parties and can be classified as follows:

Joint operations: are accounted for in the financial statements to represent the Company's contractual rights and obligations.

Jointly controlled entities: are accounted for using the equity method and are not consolidated.

Affiliates: are all entities in which the Company has significant influence, but not control. Usually, 20% to 50% voting interest investments in associates are initially recognized at cost and subsequently measured using the equity method.

**Exclusive funds**

The exclusive funds are private investment funds in which CSN's resources are allocated according to the Company's intention. They are managed by BNY Mellon Serviços Financeiros DTVM SA and Caixa Econômica Federal (CEF).

Transactions between subsidiaries, affiliates, joint ventures and joint operations

Unrealized balances and gains on transactions with subsidiaries, joint ventures and associates are eliminated proportionally to CSN's interest in the entity in question in the consolidation process. Unrealized losses are eliminated in the same way as unrealized gains, but only so far as there is no evidence of impairment. The effects on the results of transactions with jointly controlled subsidiaries are also eliminated, where part of the equity in results of jointly controlled entities is reclassified to financial expenses, cost of products sold and income and social contribution taxes.

The subsidiaries and jointly controlled entities have the same reporting date and accounting policies as those adopted by the Company.

Foreign currency transactions and balances

The 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 at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement as financial result, except when they are recognized in shareholders' equity as a result of foreign operation characterized as foreign investment.

Advances made in foreign currencies are recorded at the exchange rate of the date the entity makes the advance payments or receipts, recognizes (transaction date) as a non-monetary asset or non-monetary liability.

Impairment testing

Investments are reviewed for verification of *impairment* whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

11.h) Investment properties:

The balance of investment properties as of December 31, 2021 and 2020, is shown below:

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	Land	Buildings	Consolidated Total
Balance at December 31, 2019			
Cost	68,877	32,318	101,195
Accumulated depreciation	68,877	53,816	122,693
Balance at December 31, 2019	68,877	32,318	101,195
Acquisitions	28,733	32,864	61,597
Depreciation		(2,786)	(2,786)
Write-off		(132)	(132)
Balance at December 31, 2020	97,610	62,264	159,874
Cost	97,610	86,548	184,158
Accumulated depreciation		(24,284)	(24,284)
Balance at December 31, 2020	97,610	62,264	159,874
Depreciation (note 27)		(3,055)	(3,055)
Transfer of property, plant and equipment	4,065	1	4,066
Acquisition of Elizabeth		1,296	1,296
Transfers to other asset groups	(133)	133	
Balance at December 31, 2021	101,542	60,639	162,181
Cost	101,542	87,977	189,519
Accumulated depreciation		(27,338)	(27,338)
Balance at December 31, 2021	101,542	60,639	162,181

The Company's estimate of the fair value of investment properties was of R\$2,055,976 on December 31, 2021 (R\$1,863,563 at December 31, 2020) in the consolidated.

The average estimated useful lives for the years are as follows (in years):

	12/31/2021	Consolidated 12/31/2020
Buildings	27	27

Accounting Policy

The Company's investment properties consist of land and buildings maintained to earn rental income and capital appreciation. The measurement method used is the acquisition or construction cost less accumulated depreciation and reduction to its recoverable value, when applicable. The accumulated depreciation of buildings is calculated using the straight-line method based on the estimated useful life of the properties subject to depreciation. Land is not depreciated since it has an indefinite useful life.

12. PROPERTY, PLANT AND EQUIPMENT

	Consolidated							
	Land	Buildings and Infrastructure	Machinery, equipment and facilities	Furniture and fixtures	Construction in progress	Right of use (i)	Other (*)	Total
Balance at December 31, 2019	226,949	3,062,238	12,603,619	28,455	3,217,052	472,345	90,286	19,700,944
Cost	226,949	4,250,471	24,372,514	170,229	3,217,052	531,044	386,144	33,154,403
Accumulated depreciation		(1,188,233)	(11,768,895)	(141,774)		(58,699)	(295,858)	(13,453,459)
Balance at December 31, 2019	226,949	3,062,238	12,603,619	28,455	3,217,052	472,345	90,286	19,700,944
Effect of foreign exchange differences	30,271	57,838	186,591	2,416	4,727	4,329	1,823	287,995
Acquisitions	654	865	122,744	874	1,583,054	49,934	4,156	1,762,281
Capitalized interest ⁽¹⁾ (notes 29 and 34)					92,506			92,506
Write-offs (note 28)	(188)		(3,073)	(33)	(9)	(7,318)	(2,377)	(12,998)
Depreciation (note 27)	(458)	(780,395)	(1,564,525)	(6,747)		(62,680)	(24,517)	(2,439,322)
Transfers to other asset categories	458	67,574	1,112,024	1,338	(1,212,373)		30,979	
Transfers to intangible assets					(4,633)			(4,633)
Right of use - Remesurement						60,058		60,058
Update of the ARO (Asset retirement obligation)		269,445						269,445
Others			3	(6)	(2)		(48)	(53)
Balance at December 31, 2020	257,686	2,677,565	12,457,383	26,297	3,680,322	516,668	100,302	19,716,223
Cost	257,686	4,752,412	26,213,225	182,974	3,680,322	634,786	414,705	36,136,110
Accumulated depreciation		(2,074,847)	(13,755,842)	(156,677)		(118,118)	(314,403)	(16,419,887)
Balance at December 31, 2020	257,686	2,677,565	12,457,383	26,297	3,680,322	516,668	100,302	19,716,223
Effect of foreign exchange differences	(932)	(6,402)	(2,627)	1,418	2,076	26	(22)	(6,463)
Acquisitions		22,441	367,050	6,756	2,527,722	62,106	7,197	2,993,272
Capitalized interest ⁽¹⁾ (notes 29 and 34)					87,414			87,414
Write-offs (note 28)		(5,051)	(62,606)	(194)	(5,468)	(38,017)	(1,550)	(112,886)
Depreciation (note 27)		(163,911)	(1,845,757)	(7,043)		(68,068)	(27,878)	(2,112,657)
Transfers to other asset categories	(3,683)	265,307	2,347,346	925	(2,634,947)		25,052	
Transfers to intangible assets					(29,840)			(29,840)
Right of use - Remesurement						109,109		109,109
Update of the ARO (Asset retirement obligation)		2,357						2,357
Transfers to fixed assets to investment property without cash effect	(4,065)	(1)						(4,066)
Acquisition of Elizabeth	100,489	227,629	278,576	878	16,400		3,173	627,145
Transfers to inventory			261,504					261,504
Others			19		3			22
Balance at December 31, 2021	349,495	3,019,934	13,800,888	29,037	3,643,682	581,824	106,274	21,531,134
Cost	349,495	5,358,388	29,348,048	190,847	3,643,682	754,606	445,870	40,090,936
Accumulated depreciation		(2,338,454)	(15,547,160)	(161,810)		(172,782)	(339,596)	(18,559,802)
Balance at December 31, 2021	349,495	3,019,934	13,800,888	29,037	3,643,682	581,824	106,274	21,531,134

(*) Refer substantially to assets for railway use, such as yards, rails, mines, and sleepers.

(1) The cost of capitalized interest is calculated, basically, for the projects in the Steel and Mining which refer, substantially, to:
 - Steel: Technological updates and acquisition of new equipment for maintenance of the production capacity of Presidente Vargas Plant (RJ);
 - Mining: Expansion of Casa de Pedra (MG) and TECAR (RJ).

(i) Right of use

Below the movements of the right of use recognized on December 31, 2021:

	Consolidated				
	Land	Buildings and Infrastructure	Machinery, equipment and facilities	Others	Total
Balance at December 31, 2019	380,566	64,154	24,144	3,481	472,345
Cost	401,746	73,344	39,455	16,499	531,044
Accumulated depreciation	(21,180)	(9,190)	(15,311)	(13,018)	(58,699)
Balance at December 31, 2019	380,566	64,154	24,144	3,481	472,345
Effect of foreign exchange differences		988	294	3,047	4,329
Addition	9,039	4,561	23,720	12,614	49,934
Remesurement	34,645	3,827	21,557	29	60,058
Depreciation	(24,467)	(983)	(14,211)	(23,019)	(62,680)
Write-offs	(6,580)	(399)		(339)	(7,318)
Transfers to other asset categories	(188)	(6,062)	(3,558)	9,808	
Balance at December 31, 2020	393,015	66,086	51,946	5,621	516,668
Cost	434,689	75,882	81,598	42,617	634,786
Accumulated depreciation	(41,674)	(9,796)	(29,652)	(36,996)	(118,118)
Balance at December 31, 2020	393,015	66,086	51,946	5,621	516,668
Effect of foreign exchange differences		3	(6)	29	26
Addition	1,195	178	40,503	20,230	62,106
Remesurement	63,120	18,031	27,958		109,109
Depreciation	(23,424)	(10,343)	(25,472)	(8,829)	(68,068)
Write-offs	(16,940)		(20,944)	(133)	(38,017)
Transfers to other asset categories	22,319	(5,810)	(20,226)	3,717	
Balance at December 31, 2021	439,285	68,145	53,759	20,635	581,824
Cost	500,826	94,196	99,103	60,483	754,608
Accumulated depreciation	(61,541)	(26,051)	(45,344)	(39,848)	(172,784)
Balance at December 31, 2021	439,285	68,145	53,759	20,635	581,824

The average estimated useful lives are as follows (in years):

	Consolidated	
	12/31/2021	12/31/2020
Buildings and Infrastructure	34	34
Machinery, equipment and facilities	18	20
Furniture and fixtures	12	12
Others	10	10

Accounting Policy

Property, plant and equipment are carried at cost of acquisition, formation or construction, minus accumulated depreciation or depletion and any impairment loss. Depreciation is calculated under the straight-line method based on the remaining economic useful economic lives of assets, as mentioned in note 9. The depletion of mines is calculated based on the quantity of ore mined. Land is not depreciated since their useful life is considered indefinite. However, if the tangible assets are mine-specific, that is, used in the mining activity, they are depreciated over the shorter between the normal useful lives of such assets and the useful life of the mine. The Company recognizes in the carrying amount of property, plant and equipment the cost of replacement, and consequently reducing the carrying amount of the part that is replaced if it is probable that future economic benefits embodied therein will revert to the Company, and if the cost of the asset can be reliably measured. All other disbursements are expensed as incurred.

Capitalized interest

Borrowing costs directly attributable to the acquisition, construction and or production of qualifying assets are capitalized as part of the cost of the asset when it is probable that they will result in future economic benefits and until these projects are completed.

- Development Costs of New Ore Deposits

Costs for the development of new ore deposits, or for the expansion of the capacity of the mines in operation are capitalized and amortized by the method of units produced (extracted) based on the probable and proven quantities of ore.

- Operating Expenses

Exploration expenses are recognized as expenses until the viability of the mining activity is established; after that period, subsequent costs are capitalized.

- Waste Removal Costs

Expenses incurred during the development phase of a mine, prior to the production phase, are accounted for as part of the depreciable development costs. Subsequently, these costs are amortized over the useful life of the mine based on probable and proven reserves.

- Sterile Costs

The waste disposal costs incurred in the production phase are added to the stock value, except when a specific extraction campaign is carried out to access deeper deposits of the deposit. In this case, costs are capitalized and classified in non-current assets and are amortized over the useful life of the deposit.

13. INTANGIBLE ASSETS

	Consolidated						
	Goodwill	Customer relationships	Software	Trademarks and patents	Rights and licenses (*)	Others	Total
Balance at December 31, 2019	3,606,156	246,139	53,859	153,103	3,170,960	1,564	7,231,781
Cost	3,846,563	585,407	171,152	153,103	3,189,789	1,564	7,947,578
Accumulated amortization	(131,077)	(339,268)	(117,293)		(18,829)		(606,467)
Adjustment for accumulated recoverable value	(109,330)						(109,330)
Balance at December 31, 2019	3,606,156	246,139	53,859	153,103	3,170,960	1,564	7,231,781
Effect of foreign exchange differences		94,998	584	62,429		638	158,649
Acquisitions and expenditures			1,837				1,837
Transfer of property, plant and equipment			633		4,000		4,633
Amortization (note 27)		(63,096)	(11,248)		(5,611)		(79,955)
Others						(151)	(151)
Balance at December 31, 2020	3,606,156	278,041	45,665	215,532	3,169,349	2,051	7,316,794
Cost	3,846,563	823,540	182,059	215,532	3,193,787	2,051	8,263,532
Accumulated amortization	(131,077)	(545,499)	(136,394)		(24,438)		(837,408)
Adjustment for accumulated recoverable value	(109,330)						(109,330)
Balance at December 31, 2020	3,606,156	278,041	45,665	215,532	3,169,349	2,051	7,316,794
Effect of foreign exchange differences		(1,835)	(24)	(1,923)		(18)	(3,800)
Acquisitions and expenditures			3,302		27		3,329
Transfer of property, plant and equipment			29,840				29,840
Amortization (note 27)		(68,294)	(12,343)		(21,843)		(102,480)
Disposals						(63)	(63)
Transfers to other asset categories	39,814				(39,814)		
Business Combination Elizabeth (note 4)	83,266				330,164		413,430
Balance at December 31, 2021	3,729,236	207,912	66,440	213,609	3,437,883	1,970	7,657,050
Cost	3,969,643	816,206	221,712	213,609	3,484,778	1,970	8,707,918
Accumulated amortization	(131,077)	(608,294)	(155,272)		(46,895)		(941,538)
Adjustment for accumulated recoverable value	(109,330)						(109,330)
Balance at December 31, 2021	3,729,236	207,912	66,440	213,609	3,437,883	1,970	7,657,050

(*) Composed mainly of mining rights. Amortization is based on production volume.

The average useful life by nature is as follows (in years):

	<u>12/31/2021</u>	<u>Consolidated 12/31/2020</u>
Software	9	9
Customer relationships	13	13

13.a) Goodwill impairment test

Goodwill arising from expected future profitability of acquired companies and intangible assets with indefinite useful lives (brands) were allocated to CSN's cash generating units (CGUs) which represent the lowest level of assets or group of assets of the Company. According to IAS36, when a CGU has an intangible asset with no defined useful life allocated, the Company must perform an impairment test. The CGUs with intangible assets in this situation are shown below:

Cash generating unity	Segment	Goodwill		Trademarks		Total	
		12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Packaging ⁽¹⁾	Steel	158,748	158,748			158,748	158,748
Long steel ⁽²⁾	Steel	235,595	235,595	213,609	215,532	449,204	451,127
Mining ⁽³⁾	Mining	3,236,402	3,196,588			3,236,402	3,196,588
Other Steel ⁽⁴⁾	Steel	15,225	15,225			15,225	15,225
Cements ⁽⁵⁾	Cement	83,266				83,266	
		<u>3,729,236</u>	<u>3,606,156</u>	<u>213,609</u>	<u>215,532</u>	<u>3,942,845</u>	<u>3,821,688</u>

(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 Thüringen 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 concluded in December 2015, which recoverability is tested annually.

(4) On November 29, 2019, CSN acquired the stake held by CKTR Brasil Serviços Ltda., corresponding to 50% of CBSI's shares, and now holds 100% of CBSI's share capital.

(5) In the acquisition of Elizabeth Cimentos S.A. in August 2021 goodwill was generated for future profitability in the acquirer CSN Cimentos S.A..

The impairment testing of the goodwill and the trademark include the balance of property, plant and equipment of the cash-generating units and the intangible assets. 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 the calculation of the value in use on December 31, 2021, are as follows:

	Packaging	Mining	Other Steelmaking	Flat Steel (*)	Flat Steel (*)	Logistics	Cement
Measurement of recoverable value	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow
Cash flow projection	Until 2031 + perpetuity	Until 2064	Until 2031 + perpetuity	Until 2031 + perpetuity	Until 2034 + perpetuity	Until 2027	by 2050
Gross Margin	Gross margin updated based on historical data, impacts of business restructuring and market trends	It reflects projection of costs due to the progress of the mining plan as well as startup and project ramp up. Prices and exchange rates projected according to sectoral reports.	Gross margin updated based on historical data and market trends	Gross margin updated based on historical data and market trends	Gross margin updated based on historical data and market trends	Estimated based on market study to capture cargo and operating costs according to market trend studies	Gross margin updated based on historical data and market trends
Cost atualization	Cost based on historical data of each product and impacts of business restructuring	Update of costs based on historical data, progress of the mining plan as well as startup and project ramp up	Updated costs based on historical data and market trends	Updated costs based on historical data and market trends	Updated costs based on historical data and market trends	Study-based costs and market trends	Study-based costs and market trends
Perpetual growth rate	1% growth.	Without perpetuity	Without growth	Without growth	Without growth	Without perpetuity	Without perpetuity
Discount rate	For metal packaging, the cash flow considered a discount rate around 9,22% p.a. in real terms. For mining, flat steel and other steel (CBSI), cash flows considered a discount rate between 7% and 9.5% p.a. in nominal terms. For the logistic segment, cash flow was discounted using a discount rate between 5.87% and 6.40% 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 the assets of the subsidiary Lusosider, located in Portugal, and the assets of Stahlwerk Thüringen (SWT) located in Germany. The discount rate was applied to the discounted cash flow prepared in Euros, the functional currency of this subsidiary.

(**) refer to the assets of the subsidiary FTL - Ferrovia Transnordestina Logística SA

Based on the analyzes carried out by Management, it was not necessary to record impairment losses on the balances of these assets in the year ended December 31, 2021.

Accounting Policy

Intangible assets basically comprise assets acquired from third parties, including through business combinations. These assets are recorded at acquisition or formation cost and deducted from amortization calculated using the straight-line method based on the economic useful life of each asset, within the estimated periods of exploration or recovery.

Mineral exploration rights are classified as rights and licenses in the intangible group.

Intangible assets with an indefinite useful life 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 value of assets and liabilities of the subsidiary acquired. Goodwill on acquisitions in business combinations is recorded as intangible assets in the consolidated financial statements. The gain on bargain purchase is recorded as a gain in the income statement for the period of the acquisition. Goodwill is tested for impairment annually or at any time when circumstances indicate a possible loss. Recognized impairment losses on goodwill, if any, are not reversed. Gains and losses on the disposal of a Cash Generating Unit ("CGU"), if any, include the carrying amount of goodwill related to the CGU sold.

· Impairment of Non-financial Assets

Assets that have an indefinite useful life, such as goodwill, are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization and/or depreciation, such as fixed assets and investment properties, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The latter is the higher of an asset's fair value less costs to sell and its value in use. For impairment assessment purposes, assets are grouped at the lowest levels for which there are separately identifiable incoming cash flows (Cash Generating Units). Non-financial assets other than goodwill that have suffered impairment are reviewed subsequently each year for possible reversal of the impairment.

14. BORROWINGS AND FINANCING

The balances of loans, financing and debentures that are recorded at amortized cost are as follows:

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	Consolidated			
	Current Liabilities		Noncurrent Liabilities	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Foreign Debt				
Floating Rates:				
Prepayment	1,626,521	1,119,558	3,875,713	3,457,105
Fixed Rates:				
Bonds, Perpetual bonds, Facility, CCE and ACC	678,239	426,676	15,380,392	19,898,213
Facility	550,460	326,970	79,013	143,503
	2,855,220	1,873,204	19,335,118	23,498,821
Debt agreements in Brazil				
Floating Rate Securities in R\$:				
BNDES/FINAME, Debentures, NCE and CCB	2,677,516	2,282,279	7,886,796	7,716,307
	2,677,516	2,282,279	7,886,796	7,716,307
Total Borrowings and Financing	5,532,736	4,155,483	27,221,914	31,215,128
Transaction Costs and Issue Premiums	(45,877)	(29,030)	(201,251)	(70,928)
Total Borrowings and Financing + Transaction cost	5,486,859	4,126,453	27,020,663	31,144,200

14.a) Borrowing and amortization, financing, and debentures

The following table shows amortization and funding during the year:

	Consolidated	
	12/31/2021	12/31/2020
Opening balance	35,270,653	27,967,036
New debts	12,915,332	8,116,247
Repayment	(17,639,178)	(6,448,658)
Payments of charges	(2,137,782)	(1,922,130)
Accrued charges (note 29)	2,140,961	2,002,052
Acquisition of Elizabeth	372,123	
Others ⁽¹⁾	1,585,413	5,556,106
Closing balance	32,507,522	35,270,653

1. Including unrealized exchange and monetary variations and funding cost.

In 2021, the Company entered into new debt agreements and amortized borrowings as shown below:

Funding and Amortization

Nature	Consolidated		
	New debts	Repayment	Interest payment
Prepayment ⁽¹⁾	2,613,925	(2,186,191)	(143,237)
Bonds, Perpetual bonds, ACC, CCE and Facility ⁽²⁾	5,850,504	(11,083,220)	(1,550,747)
BNDES/FINAME, Debentures, NCE and CCB ⁽³⁾	4,450,903	(4,369,767)	(443,798)
	12,915,332	(17,639,178)	(2,137,782)



(1) During the first quarter of 2021, the Company amortized debts initially scheduled for October 2021 and January 2022 in the amount of US\$329 million, equivalent to R\$1.9 billion. In June 2021, the Company raised Prepayments through its subsidiary CSN Mineração in the total amount of US\$350 million, equivalent to R\$1.9 billion. In addition, the CSN Mineração raised an additional US\$86 million (equivalent to R\$467 million) with other financial institutions over the year 2021.

(2) In the second quarter of 2021 the Company issued debt securities in the foreign market ("Notes"), in the amount of US\$850 million, equivalent to R\$4.3 billion, through its subsidiary CSN Resources, maturing in 2031. Additionally, it used part of the funds in the amount of US\$421 million in the "Tender Offer" of Notes issued by CSN Resources S.A. maturing in 2023. All Notes mentioned above are unconditionally and irrevocably guaranteed by the Company.

In the third quarter, the Company anticipated amortization of Perpetual Bonds in the amount of \$1.0 billion from its subsidiary Island XII.

(3) In the first quarter of 2021 The Company repurchased 450,000 debentures in the amount of R\$391 million anticipating maturities scheduled from March 2021 to December 2023.

In July 2021, the subsidiary CSN Mineração approved its first issue of simple debentures, not convertible into shares, of the chirography type, in two (2) series, in the total amount of R\$1.0 billion, with market interest and updated by IPCA. The maturity of the Debentures will be 10 years (2031) for the first series and 15 years (2036) for the second series with semi-annual interest payments. For this operation, the Company contracted an interest rate swap.

In the fourth quarter of 2021, the Company carried out its 11th issue of debentures in the amount of R\$1.5 billion with maturities in 2027 and 2028. Additionally, it contracted a borrowing (NCE) with Banco do Brasil in the amount of R\$1.8 billion with maturities in 2025 and 2026, using the funds raised to pay off borrowing (NCE) in the amount of R\$1.8 billion with maturities in 2023 and 2024.

The following table shows the average interest rate:

		Consolidated	
		12/31/2021	
Average interest rate (i)		Total debt	
US\$	5.35%		21,560,865
EUR	1.47%		629,473
R\$	10.75%		10,564,312
			32,754,650

(i) To determine the average interest rate on debt contracts with floating rates, the Company used the rates applied on December 31, 2021.

14.b) Maturities of loans, financing and debentures presented in current and non-current liabilities

		Consolidated	
		12/31/2021	
	Borrowings and financing in foreign currency	Borrowings and financing in national currency	Total
2022	2,855,220	2,677,516	5,532,736
2023	1,596,549	2,250,571	3,847,120
2024	462,792	983,918	1,446,710
2025	291,079	716,451	1,007,530
2026	3,717,059	872,802	4,589,861
2027	195,318	852,365	1,047,683
After 2027	13,072,321	2,210,689	15,283,010
	22,190,338	10,564,312	32,754,650

Covenants

The Company maintains contracts that provide for the fulfillment of certain non-financial obligations, as well as the maintenance of certain parameters and performance indicators, such as the equity ratio disclosure of its audited financial statements according to regulatory deadlines or payment of commission for risk assumption, if the indicator of net debt to EBITDA reaches the levels foreseen in those contracts.

Until now, the Company follows all financial and non-financial obligations (covenants) of its current contracts

Accounting Policy

Borrowings and financing are initially recognized at fair value, net of transaction costs and subsequently measured at amortized cost using the effective interest and charge methods. Interest, commissions, and possible financial charges are recorded pro-rata on an accrual basis.

15. FINANCIAL INSTRUMENTS

I - Identification and valuation of financial instruments

The Company may operate with several financial instruments, with emphasis on cash and cash equivalents, including financial investments, marketable securities, accounts receivable from customers, accounts payable to suppliers and borrowings and financing. Additionally, we may also operate with derivative financial instruments, such as swap exchange rate, swap interest and derivatives with commodities.

Considering the nature of the instruments, the fair value is basically determined by the use of quotations in the capital markets in Brazil and the Mercantile and Futures Exchange. The amounts recorded in current assets and liabilities have immediate liquidity. Considering the term and characteristics of these instruments, fair values do not differ from the recorded amounts.

Classification of financial instruments

Consolidated	Notes	12/31/2021			Consolidated 12/31/2020		
		Fair value through profit or loss	Measured at amortized cost	Balances	Fair value through profit or loss	Measured at amortized cost	Balances
Assets							
Current							
Cash and cash equivalents	5		16,646,480	16,646,480		9,944,586	9,944,586
Short-term investments	6	2,383,059	261,673	2,644,732	3,305,109	478,253	3,783,362
Trade receivables	7		2,597,838	2,597,838		2,867,352	2,867,352
Dividends and interest on equity	10		76,878	76,878		38,088	38,088
Trading securities	10	12,028		12,028	5,065		5,065
Loans - related parties	10		4,511	4,511			
Total		2,395,087	19,587,380	21,982,467	3,310,174	13,328,279	16,638,453
Non-current							
Investments	6		147,671	147,671		123,409	123,409
Other trade receivables	10		2,345	2,345		2,445	2,445
Eletrobrás compulsory loan	10		859,607	859,607		852,532	852,532
Receivables by indemnity	10		534,896	534,896		517,183	517,183
Loans - related parties	10		1,143,228	1,143,228		966,050	966,050
Investments	11	190,321		190,321	59,879		59,879
Total		190,321	2,687,747	2,878,068	59,879	2,461,619	2,521,498
Total Assets		2,585,408	22,275,127	24,860,535	3,370,053	15,789,898	19,159,951
Liabilities							
Current							
Borrowings and financing	14		5,532,736	5,532,736		4,155,483	4,155,483
Trade payables	18		6,446,999	6,446,999		4,819,539	4,819,539
Trade payables - drawee risk	16		4,439,967	4,439,967		623,861	623,861
Dividends and interest on capital	16		1,206,870	1,206,870		946,133	946,133
Leases	17		119,047	119,047		93,626	93,626
Derivative financial instruments					8,722		8,722
Total			17,745,619	17,745,619	8,722	10,638,642	10,647,364
Non-current							
Borrowings and financing	14		27,221,914	27,221,914		31,215,128	31,215,128
Trade payables	18		98,625	98,625		543,527	543,527
Derivative financial instruments		101,822		101,822	97,535		97,535
Leases	17		492,504	492,504		436,505	436,505
Total		101,822	27,813,043	27,914,865	97,535	32,195,160	32,292,695
Total Liabilities		101,822	45,558,662	45,660,484	106,257	42,833,802	42,940,059

Fair value measurement

The table below shows the financial instruments recorded at fair value through profit or loss, classifying them according to the fair value hierarchy:



Consolidated	12/31/2021			12/31/2020		
	Level 1	Level 2	Balances	Level 1	Level 2	Balances
Assets						
Current						
Financial investments	2,383,059		2,383,059	3,305,109		3,305,109
Trading securities	12,028		12,028	5,065		5,065
Non-current						
Investments	190,321		190,321	59,879		59,879
Total Assets	2,585,408		2,585,408	3,370,053		3,370,053
Liabilities						
Current						
Derivative financial instruments					8,722	8,722
Non-current						
Derivative financial instruments		101,822	101,822		97,535	97,535
Total Liabilities		101,822	101,822		106,257	106,257

Level 1 - Data are prices quoted in an active market for items identical to the assets and liabilities being measured.

Level 2 - Consider inputs observable in the market, such as interest rates, exchange rates, etc., but are not prices negotiated in active markets.

There are no assets or liabilities classified as level 3.

II - Investments in securities valued at fair value through profit or loss

The Company has common shares (USIM3), preferred shares (USIM5) of Usiminas ("Usiminas shares") and shares of Panatlântica SA (PATI3), which are designated as fair value through profit or loss.

Usiminas shares are classified as current assets in financial investments and Panatlântica shares are classified as non-current assets under the investment item. They are recorded at fair value, based on the market price quote in B3.

In accordance with the Company's policy, the gains and losses arising from the variation in the share price are recorded directly in the income statement as financial result in the case of financial investments, or as other operating income and expenses in the case of long-term investments.

Class of shares	12/31/2021				Sales of shares				12/31/2020				12/31/2021 12/31/2020 12/31/2019		
	Quantity	Equity interest (%)	Share price	Closing Balance	Quantity	Share price	Net cash received	Net gain from the transaction	Quantity	Equity interest (%)	Share price	Closing Balance	Profit or loss for the period in 2021 (notes 28 and 29)		
USIM3	106,620,851	15.12%	14.51	1,547,069	(535,800)	23.57	12,627	3,569	107,156,651	15.19%	15.69	1,681,288	(121,593)	623,652	(168,236)
USIM5	55,144,456	10.07%	15.16	835,990	(56,000,000)	23.12	1,294,720	502,275	111,144,456	20.29%	14.61	1,623,821	506,890	566,837	32,232
				2,383,059			1,307,347	505,844				3,305,109	385,297	1,190,489	(136,004)
PATI3	2,705,726	11.31%	70.34	190,321					2,065,529	11.31%	28.99	59,879	109,254	12,579	17,224
				2,573,380			1,307,347	505,844				3,364,988	494,551	1,203,068	(118,780)

In May 2021, 535,800 common shares (USIM3) were sold for R\$12,627 and 56,000,000 preferred shares (USIM5) were sold for R\$1,294,720, totaling R\$1,307,347.

III - Financial risk management:

The Company uses risk management strategies with guidance on the risks incurred by us. The nature and general position of financial risks are regularly monitored and managed in order to assess results and the financial impact on cash flow. Credit limits and hedge quality of counterparties are also reviewed periodically.

Market risks are hedged when we consider necessary to support the corporate strategy or when it is necessary to maintain the level of financial flexibility.

We are exposed to exchange rate, interest rate, market price and liquidity risks.

The Company may manage some of the risks through the use of derivative instruments not associated with any speculative trading or short selling.

15.a) Exchange rate, market price and interest rate risk:

Exchange rate risk

The exposure arises from the existence of assets and liabilities denominated in Dollar or Euro, since the Company's functional currency is substantially the Real and is called natural exchange exposure. The net exposure is the result of the offsetting of the natural exchange exposure by the instruments of *hedge* adopted by CSN.

The consolidated net exposure as of December 31, 2021, is shown below:

Foreign Exchange Exposure	12/31/2021	
	(Amounts in US\$'000)	(Amounts in €'000)
Cash and cash equivalents overseas	1,656,271	74,652
Trade receivables	212,424	5,004
Financial investments	23,748	
Other assets	57,424	
Total Assets	1,949,867	79,656
Borrowings and financing	(3,866,290)	
Trade payables	(613,961)	(2,455)
Advances from customer	(197,325)	
Other liabilities	(9,631)	
Total Liabilities	(4,687,207)	(2,455)
Foreign exchange exposure	(2,737,340)	77,201
Cash flow hedge accounting	2,655,350	
Exchange rate swap CDI x Dollar	(67,000)	
Net foreign exchange exposure	(148,990)	77,201

CSN uses as a strategy the Hedge Accounting, as well as derivative financial instruments to protect future cash flows.

Sensitivity analysis of Derivative Financial Instruments and Consolidated Foreign Exchange Exposure

The Company considered scenarios 1 and 2 to be 25% and 50% deterioration for currency volatility, using the exchange rate closing rate as of December 31, 2021, as a reference.

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

Currency	Exchange rate	12/31/2021		
		Probable scenario	Scenario 1	Scenario 2
USD	5.5805	5.0611	6.9756	8.3708
EUR	6.3210	5.7378	7.9013	9.4815
USD x EUR	1.1327	1.1337	1.4159	1.6991

The effects on the result, considering scenarios 1 and 2 are shown below:



Instruments	12/31/2021				
	Notional	Risk	Probable scenario (*) R\$	Scenario 1 R\$	Scenario 2 R\$
Gross exchange position	(2,737,340)	Dollar	1,421,774	(3,818,931)	(7,637,863)
Cash flow hedge accounting	2,655,350	Dollar	(1,379,189)	3,704,545	7,409,090
Exchange rate swap CDI x Dollar	(67,000)	Dollar	34,800	(93,473)	(186,947)
Net exchange position	(148,990)	Dollar	77,385	(207,859)	(415,720)
Net exchange position	77,201	Euro	(45,024)	121,997	243,994

(*) The probable scenarios were calculated considering the following variations for risks: Real x Dollar – valuation of the Real by 9.31% / Real x Euro - valuation of the Real by 9.23% / Euro x Dollar - devaluation of Euro by 0.09%. Source: Central Bank of Brazil and European Central Bank quotations on 2/22/2022.

Stock market price risks

The Company is exposed to the risk of changes in stock prices due to investments valued at fair value through profit and loss that are quoted based on the market price at B3.

Sensitivity analysis for stock price risks

We present below the sensitivity analysis for share price risks. The Company considered scenarios 1 and 2 to be 25% and 50% devaluation in the share price using the closing price on December 31, 2021, as a reference. The probable scenario considered a 5% devaluation in the share price.

The effects on the result, considering the probable scenarios, 1 and 2 are shown below:

Class of shares	12/31/2021		
	Probable scenario 5%	Scenario 1 25%	Scenario 2 50%
USIM3	(77,353)	(386,767)	(773,534)
USIM5	(41,799)	(208,997)	(417,995)
PAT13	(9,516)	(47,580)	(95,160)

Interest rate risk:

This risk arises from financial investments, borrowings and financing and debentures linked to the fixed and floating interest rates of the CDI, TJLP and LIBOR, exposing these financial assets and liabilities to interest rate fluctuations as shown in the sensitivity analysis table below.

Sensitivity analysis of changes in interest rates

We present below the sensitivity analysis for interest rate risks. The Company considered scenarios 1 and 2 to be 25% and 50% deterioration for interest rate volatility using the closing rate as of December 31, 2021, as a reference.

The interest rates used in the sensitivity analysis and their respective scenarios are shown below:

Interest	Interest rate	12/31/2021		
		Scenario 1	Scenario 2	
CDI	9.15%		11.44%	13.73%
TJLP	5.32%		6.65%	7.98%
LIBOR	0.34%		0.42%	0.51%

The effects on the result, considering scenarios 1 and 2 are shown below:

Changes in interest rates	% p.a	Assets	Liabilities	Probable scenario (+)	Consolidated	
					Impact on profit or loss	
					Scenario 1	Scenario 2
CDI	9.15	3,908,490	(5,778,965)	(2,041,623)	(2,084,411)	(2,127,198)
TJLP	5.32		(800,884)	(843,491)	(854,143)	(864,794)
LIBOR	0.34		(5,449,749)	(5,468,210)	(5,472,825)	(5,477,440)

(*) The sensitivity analysis is based on the premise of maintaining the market values as of December 31, 2021 as a probable scenario recorded in the company's assets and liabilities.

· **Market price risk:**

The Company is also exposed to market risks related to the volatility of commodity and input prices. In line with its risk management policy, risk mitigation strategies involving commodities can be used to reduce cash flow volatility. These mitigation strategies may incorporate derivative instruments, predominantly forward transactions, futures, and options.

Sensitivity analysis for price risks "Platts index"

The cash flow hedge accounting operation - "Platts" index was settled on October 2, 2021, in the amount of R\$71,936 and no change occurred.

15.b) Instruments protection: Derivatives and Hedge accounting cash flow and net investment hedge in foreign subsidiaries

· **Derivative financial instruments portfolio position**

Swap exchange rate Dollar x Euro

The subsidiary Lusosider has derivative transactions to hedge its dollar exposure against the euro.

Swap exchange rate CDI x Dollar

The Company has derivative transactions with Banco Bradesco to protect its debt in NCE raised in September 2019 with maturity in October 2023 in the amount of US\$67 million (equivalent to R\$278 million) at a cost compatible with that usually practiced by the Company.

Additionally, in 2021, the Company sold US\$100 million in NDF (Non-Deliverable Forward) with maturity in September 2021.

Swap exchange rate CDI x IPCA

The subsidiary CSN Mineração has derivative operations to protect its exposure to the IPCA.

Counterparties	Maturity	Functional Currency	Notional amount	Appreciation (R\$)		Fair value (market) Amounts receivable / (payable)	Impact on financial income (expenses) (note 29)		
				Asset position	Liability position		12/31/2021	12/31/2020	12/31/2019
				<i>Exchange rate swap Dollar x Real</i> Total dollar x real swap (NDF)	Settled	Dollar			
<i>Exchange rate swap Dollar x Euro</i> <i>Exchange rate swap Dollar x Euro</i> Total dollar-to-euro swap	Settled Settled	Dollar Dollar				1,784 5,335	(4,749) (4,321)	783	
<i>Exchange rate swap GBP x Euro</i> Total Swap GBP x Euro	Settled	GBP					(602)		
<i>Exchange rate swap CDI x Dollar</i> Total Swap CDI x dollar	10/02/2023	Dollar	(67,000)	298,408	(400,230)	(101,822)	(9,960)	(106,143)	4,203
<i>Interest rate (Debentures) CDI x IPCA</i> <i>Interest rate (Debentures) CDI x IPCA</i> Total interest rate (Debentures) CDI x IPCA	07/15/2036 07/15/2031	Real Real	576,448 423,552	616,912 464,380	(634,400) (481,812)	(17,488) (17,432)	(17,488) (17,432)		
			1,000,000	1,081,292	(1,116,212)	(34,920)	(34,920)		
				1,379,700	(1,516,442)	(136,742)	(439)	(115,815)	4,986

· Cash flow hedge accounting

Foreign exchange hedge accounting

The Company formally designates relations of hedge of cash flows to protect highly probable future flows exposed to the dollar related to sales made in dollars.

With the objective of better reflecting the accounting effects of the hedge exchange rate in the result, CSN designated part of its dollar liabilities as an instrument of hedge future exports. As a result, the exchange rate variation resulting from the designated liabilities will be transiently recorded in shareholders' equity and will be reflected in the income statement when said exports occur, thus allowing the recognition of dollar fluctuations on liabilities and on exports to be recorded at the same time. It is noteworthy that the adoption of this accounting hedge it does not imply the contracting of any financial instrument.

The table below presents a summary of the relations of *hedge* as of December 31, 2021:



Designation Date	Hedging Instrument	Hedged item	Type of hedged risk	Hedged period	Exchange rate on designation	Designated amounts (US\$'000)	Amortized part (USD'000)	12/31/2021	
								Effect on Result (*) (R\$'000)	Impact on Shareholders' equity (R\$'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	(60,000)	(33,016)	
07/23/2015	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	3.2850	100,000	(100,000)	(52,436)	
07/23/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.2850	30,000	(24,000)	(12,057)	(13,773)
07/24/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.3254	100,000	(100,000)	(39,382)	(39,382)
07/27/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.3557	25,000	(24,150)	(9,694)	(1,891)
07/27/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.3557	70,000	(56,000)	(27,143)	(31,147)
07/27/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.3557	30,000	(24,000)	(11,633)	(13,349)
07/28/2015	Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	August 2018 - October 2022	3.3815	30,000	(24,000)	(11,478)	(13,194)
3/8/2015	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 2018 - October 2022	3.3940	355,000	(343,000)	(131,680)	(26,238)
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	(820,045)		(794,535)
07/31/2019	Bonds and Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	January 2020 - April 2026	3.7649	1,342,761	(261,261)	(21,781)	(1,949,731)
10/1/2020	Bonds with no maturity date and Export prepayments in US\$ to third parties	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	March 2020 - December 2050	4.0745	1,416,000	(1,237,000)	(174,990)	(1,506,060)
01/28/2020	Bonds	Part of the highly probable future monthly iron ore exports	Foreign exchange - R\$ vs. US\$ spot rate	March 2017 - January 2028	4.2064	1,000,000			(1,374,101)
Total						5,728,806	(3,073,456)	(525,290)	(5,763,401)

(*) On December 31, 2021, the amount of (R\$525,290) was recorded in Other Operating Expenses. As of December 31, 2020, (R\$ 1,667,886).

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

The changes in the hedge accounting amounts recognized in shareholders' equity as of December 31, 2021 are as follows:

	12/31/2020	Movement	Realization	Consolidated 12/31/2021
Cash flow hedge accounting	5,125,058	1,163,633	(525,290)	5,763,401

The realization of Hedge accounting cash flow is recognized in Other operating income and expenses, note 28.

As of December 31, 2021, the hedging relationships established by the Company were effective according to the retrospective and prospective tests performed. Thus, no reversal for hedge accounting ineffectiveness was recognized.

Cash flow hedge accounting - "Platts" index

The Company has iron ore derivative instruments, entered into by its subsidiary CSN Mineração S.A., in order to reduce the volatility of its exposure to the commodity, the operations were settled on October 02, 2021.

The Company formally designated the hedge relationship and, consequently, applied the hedge accounting with the derivative instrument designated as hedging instrument and the Platts index applicable to a portion of its highly probable future sales of iron ore was designated as the hedged item. Accordingly, fluctuations of the "Platts" index will be initially recorded in the shareholders' equity as Other Comprehensive Income and will be reclassified to the income statement when the referred sales occur.

The table below shows the result of the derivative instrument on December 31, 2021:

Maturity	Notional	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020
		Other income and expenses (note 28)		Other comprehensive income		Exchange variation	
09/02/2020 (Settled)	Platts		(31,678)				(136)
10/02/2020 (Settled)	Platts		(132,997)				(9,051)
11/04/2020 (Settled)	Platts		(85,164)				(7,301)
12/02/2020 (Settled)	Platts		(33,310)				52
02/02/2021 (Settled)	Platts	(36,405)			(6,888)	(2,690)	(185)
03/02/2021 (Settled)	Platts	(34,116)			6,063	(2,870)	117
04/02/2021 (Settled)	Platts	11,961				59	
05/04/2021 (Settled)	Platts	(30,226)				1,133	
05/12/2021 (Settled)	Platts	(37,594)				2,308	
06/02/2021 (Settled)	Platts	(134,768)				10,880	
07/02/2021 (Settled)	Platts	(76,330)				5,638	
08/02/2021 (Settled)	Platts	7,088				(305)	
09/02/2021 (Settled)	Platts	233,546				(182)	
10/02/2021 (Settled)	Platts	69,116				2,819	
		(27,728)	(283,149)		(825)	16,790	(16,504)

The change in the amounts related to cash flow hedge accounting - "Platts" index recorded in shareholders' equity on December 31, 2021, is shown as follows:

	12/31/2020	Movement	Realization	12/31/2021
Cash flow hedge accounting - "Platts"	825	26,903	(27,728)	
Income tax and social contribution on cash flow hedge accounting	(280)	(9,148)	9,428	
Fair Value of cash flow accounting - Platts, net	545	17,755	(18,300)	

Cash flow hedge accounting - index "Platts" has been fully effective since the inception of the derivative instruments.

The Company prepares formal documentation indicating how the designation of the hedge accounting cash flow - "Platts" index is aligned with CSN's risk management objective and strategy, identifying the hedging instruments used, the hedged item, the nature of the risk to be hedged and demonstrating the effectiveness of the hedge relationships, debt instruments and iron ore derivative instruments (index "Platts") in amounts equivalent to the portion of future sales, comparing the designated amounts with the expected values in accordance with its budgets.

· **Net investment hedge in foreign subsidiaries**

The information related to the net investment hedge did not change in relation to that disclosed in the Company's accounts as of December 31, 2020. The balance recorded on December 31, 2021, and December 31, 2020, is R\$6,293.

· **Classification of derivatives in the balance sheet and income**

Instruments	Liabilities			12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2019
	Current	Non-current	Total	Other operating income expenses (note 28)	Other comprehensive income	Financial income (expenses), net (note 29)				
Exchange rate swap Dollar x Real						37,322				783
Exchange rate swap Dollar x Euro						7,119		(9,070)		
Exchange rate swap GBP x Euro								(602)		
Exchange rate swap CDI x Dollar		(101,822)	(101,822)					(9,960)	(106,143)	4,203
Iron ore derivative				(27,728)	(283,149)			16,790	(16,504)	
Interest rate swap CDI x IPCA	(34,920)		(34,920)					(34,920)		
	(34,920)	(101,822)	(136,742)	(27,728)	(283,149)			(825)	16,351	(132,319)
										4,986

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15.c) Liquidity risk

It is the risk that the Company may not have sufficient net funds to settle its financial commitments, as a result of the mismatch of term or volume between expected receipts and payments.

Future receipt and payment premises are established to manage cash liquidity in domestic and foreign currencies, which are monitored on a day-to-day basis by the Treasury Department. The payment schedules for long-term installments of borrowings and financing and debentures are presented in note 14.

The following are the contractual maturities of financial liabilities including interest.

At December 31, 2021					Consolidated
	Less than one year	From one to two years	From two to five years	Over five years	Total
Borrowings, financing and debentures (note 14)	5,532,736	5,293,830	6,645,074	15,283,010	32,754,650
Lease Liabilities (note 17)	119,047	161,417	134,040	197,047	611,551
Derivative financial instruments (note 15 I)		101,822			101,822
Trade payables (note 18)	6,446,999	44,340	54,285		6,545,624
Trade payables - Drawee Risk (note 16)	4,439,967				4,439,967
Dividends and interest on equity (note 16)	1,206,870				1,206,870
	17,745,619	5,601,409	6,833,399	15,480,057	45,660,484

IV – Fair values of assets and liabilities in relation to the book value

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

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

The estimated fair value for certain consolidated long-term borrowings and financing was calculated at current market rates, considering the nature, term and risks similar to those of the registered contracts, as follows:

	12/31/2021		12/31/2020	
	Closing Balance	Fair value	Closing Balance	Fair value
Perpetual bonds ⁽¹⁾			5,203,773	5,157,465
Fixed Rate Notes	15,617,091	15,700,276	15,067,341	15,744,067
(1) The Perpetual Bond was settled on September 23, 2021				

15.d) Credit risk

The exposure to credit risks of financial institutions complies with the parameters established in the financial policy. The Company practices a detailed analysis of the financial position of its customers and suppliers, the determination of a credit limit and the permanent monitoring of its outstanding balance.

With respect to financial investments, the Company only invests in institutions with low credit risk assessed by credit rating agencies. Since part of the funds is invested in repo operations that are backed by Brazilian government bonds, there is also exposure to the credit risk of the country.

As for 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, before granting the credit limit and payment terms, and periodically reviewed based on procedures and circumstances of each business area.

15.e) 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 Company's consolidated capital structure, with financing by equity and third-party capital:

Thousands of reais	12/31/2021	12/31/2020
Shareholder's equity (equity)	23,374,389	11,251,505
Borrowings and Financing (Third-party capital)	32,507,522	35,270,653
Gross Debit/Shareholder's equity	1.39	3.13

Accounting Policy

The Company's financial instruments are classified according to the definition of the business model adopted by the Company and the characteristics of the cash flow, in the case of financial assets.

Upon initial recognition, financial assets can be classified into three categories: assets measured at amortization cost, fair value through profit or loss and fair value through other comprehensive income.

Financial assets are derecognized when the rights to receive cash flows of the investments have expired or been transferred; in the latter case, provided that the Company has substantially transferred all risks and benefits of the property.

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

Financial liabilities are classified as amortized cost or fair value through profit or loss. Management determines the classification of its financial assets and liabilities upon initial recognition.

Financial liabilities are derecognized only when they are extinguished, that is, when the obligation specified in the contract 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.

Financial assets and liabilities are offset, and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle them on a net basis, or realize the asset and settle the liability simultaneously.

Derivative Financial Instruments and Hedging Activities

Initially, derivatives are recognized at fair value on the date that a derivative contract is entered into and are subsequently measured at fair value with the changes recorded in the income statement in the caption Financial Result in the income statement.

Hedge accounting: The Company adopts hedge accounting and designates certain financial liabilities as a hedging instrument for foreign exchange risk and price risk ("Platts" index) associated with cash flows arising from forecasted and highly probable exports (cash flow hedge).

The Company documents, at the inception of the transaction, the relationships between the hedging instruments and the hedged items (expected exports), as well as the risk management objectives and strategy for undertaking various hedging transactions. In addition, it documents its assessment, both at the hedge's inception and on an ongoing basis, that the hedge transactions are highly effective in offsetting changes in cash flows of hedged items.

The effective portion of changes in the fair value of financial liabilities designated and qualified as cash flow hedges is recognized in equity, under "Hedge Accounting". Gains or losses related to the ineffective portion are recognized in other operating expenses/income, when applicable.



Gains and losses from cash flow hedge accounting of debt financial instruments and iron ore derivative financial instruments will not immediately affect the Company's result, but only to the extent that exports are realized.

The amounts accumulated in equity are realized in the operating result in the periods when the forecasted exports affect the result.

When a hedge instrument expires or is settled early, or when the hedge relationship no longer meets the criteria for hedge accounting, or when Management decides to discontinue hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity, and from that time onwards the foreign exchange variations are recorded in the financial result. When the forecasted transaction is realized, the gain or loss is reclassified to operating income. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that had been reported in equity is immediately transferred to the income statement under "Other Operations".

Investment hedge: The Company designates for net investment hedge a portion of its financial liabilities as a hedging instrument of its investments abroad with functional currency different from the Group's currency in accordance with IAS39. This relationship occurs because financial liabilities are related to investments in the amounts necessary for the effective relationship.

The Company documents, at the inception of the transaction, the relationships between hedging instruments and hedged items, as well as the risk management objectives and strategy for undertaking hedging transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, that the hedging transactions are highly effective in offsetting changes in the hedged items.

The effective portion of changes in the fair value of financial liabilities that are designated and qualify as net investment hedges is recognized in equity under Hedge Accounting. The gains or losses related to the ineffective portion are recognized in Other Operations, when applicable. If at any time during the hedge relationship the debt balance is greater than the investment balance, the exchange variation on the excess debt is reclassified to the income statement as other operating income/expenses (hedge ineffectiveness).

The amounts accumulated in the equity will be realized in the income statement by the disposal or partial disposal of the foreign operation.

16. OTHER PAYABLES

The other obligations classified in current and non-current liabilities have the following composition:

	Current		Non-current		Consolidated
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2020
Payables to related parties (note 23 b)	50,624	70,458	66,607		78,083
Derivative financial instruments (note 15 I)		8,722	101,822		97,535
Dividends and interest on capital (note 15 I)	1,206,870	946,133			
Advances from customers ⁽¹⁾	2,140,783	1,100,772	947,896		1,725,838
Taxes in installments	51,999	45,331	152,420		160,247
Profit sharing - employees	223,885	150,341			
Taxes payable			10,378		38,493
Provision for consumption and services	216,692	175,242			
Third party materials in our possession	418,084	84,832			
Trade payables - Drawee Risk and forfaiting (note 18)	4,439,967	623,861			
Trade payables (note 18)			98,625		543,527
Lease Liabilities (note 17)	119,047	93,626	492,504		436,505
Other payables	36,703	58,321	77,912		65,108
	8,904,654	3,357,639	1,948,164		3,145,336

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1. Advances from customers: During 2019, the Company received in advance, through its subsidiary CSN Mineração, the total amount of US\$746 million (R\$2,907 million) related to supply contracts for approximately 33 million tons of iron ore signed with an important international player, the term for the execution of the contracted volumes is 5 years. On July 16, 2020, the Company concluded the contract for the additional supply of approximately 4 million tons of iron ore, and the amount received in advance, on August 28, 2020, was US\$ 115 million (R\$629 million). The term for the execution of the contract is 3 years.

Price adjustment overpayments made as a result of the provisional price charged when invoices were issued, subject to adjustments based on the Platts index for the period determined in the sales contract. With the recent fall of the Platts index, the subsidiary CSN Mineração recognized on December 31, 2021, the amount of R\$1.1 billion in advance payments from customers.

17. LEASE LIABILITIES

Lease liabilities are shown below:

	12/31/2021	Consolidated 12/31/2020
Leases	1,790,193	1,623,523
Present value adjustment - Leases	(1,178,642)	(1,093,392)
Total lease liabilities	611,551	530,131
Classified:		
Current	119,047	93,626
Non-current	492,504	436,505
Total lease liabilities	611,551	530,131

The Company has lease agreements for port terminals in Itaguaí, the Solid Bulk Terminal - TECAR, used for loading and unloading coal and iron ores and the Container Terminal - TECON, with remaining terms of 27 and 31 years, respectively, and lease agreement for railway operation using the Northeast network with a remaining term of 7 years.

Additionally, the Company has property lease agreements, used as operational facilities and administrative and sales offices, in several locations where the Company operates, with remaining terms of 2, 5 and 15 years.

CSN also has lease contracts for operating equipment, used in mining operations and in the steel industry, with terms of 2 to 5 years.

The present value of future obligations was measured using the implicit rate observed in the contracts and for contracts that did not have a rate, the Company applied the incremental rate of loans - IBR, both in nominal terms.

The average incremental rate used in measuring lease and right-of-use liabilities in the agreements entered into during the year ended December 31, 2021, is 5.88% p.a. for 3-year agreements and ranges from 9.10% to 18.02% p.a. for 2-year agreements.

The movement of lease liabilities is shown in the table below:



	12/31/2021	Consolidated 12/31/2020
Opening balance	530,131	474,390
New leases	69,379	52,835
Present Value Adjustments - New leases	(7,273)	(6,511)
Contract review	109,860	63,250
Write-off	(38,626)	(7,757)
Payments	(114,303)	(103,648)
Interest appropriated	62,470	54,236
Exchange variation	(87)	3,336
Net balance	611,551	530,131

The estimated future minimum payments for the lease agreements include determinable variable payments, which are certain to occur, based on minimum performance and contractually fixed rates.

As of December 31, 2021, the expected minimum payments are the following:

	Less than one year	Between one and five years	Over five years	Consolidated Total
Leases	125,756	418,012	1,246,425	1,790,193
Present value adjustment - Leases	(6,709)	(122,555)	(1,049,378)	(1,178,642)
	119,047	295,457	197,047	611,551

Recoverable PIS / COFINS

Lease liabilities were measured at the amount of consideration with suppliers, that is, without considering the tax credits incurred after payment. The potential right of PIS and COFINS embedded in the lease liability is shown below.

	12/31/2021	Consolidated 12/31/2020
Leases	1,777,209	1,603,100
Present value adjustment - Leases	(1,177,668)	(1,091,275)
Potencial PIS and COFINS credit	164,392	148,287
Present value adjustment – Potential PIS and COFINS credit	(108,934)	(100,943)

Lease payments not recognized as a liability:

The Company chose not to recognize lease liabilities in contracts with a term of less than 12 months and for low value assets. Payments made for these contracts are recognized as expenses when incurred.

The Company has contracts for the right to use ports (TECAR) and railways (FTL) which, even if they establish minimum performance, it is not possible to determine its cash flow since these payments are fully variable and will only be known when they occur. In such cases, payments will be recognized as expenses when incurred.

The expenses related to payments not included in the measurement of the lease liability during the year are:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Contract less than 12 months	339	549	10,819
Lower Assets value	4,975	9,563	3,853
Variable lease payments	498,529	270,449	177,460
	503,843	280,561	192,132

In accordance with the guidelines of IFRS 16, the Company uses the discounted cash flow technique to measure and remeasure liabilities and use rights, without considering the projected inflation in the flows to be discounted.

The Company discloses below the comparative balances of lease liabilities, right to use, financial expenses and depreciation expenses with the use of rates in real terms to discount a present value of flows also in real terms.

	12/31/2021		Consolidated 12/31/2020	
	Rate in nominal terms and actual flow	Rate and actual flow in nominal terms	Rate in nominal terms and actual flow	Rate and actual flow in termos nominais
Lease Liability	611,551	909,878	530,131	595,193
Right of net use	581,824	879,812	511,882	547,671
Financial expenses	(58,115)	(94,892)	(50,609)	(63,744)
Depreciation	(62,289)	(84,148)	(57,342)	(59,560)

In order to measure the balances using the rate in real terms, the inflation projection (IPCA) released by the Central Bank of Brazil was used.

Accounting Policy

When entering into a contract, the Company assesses whether the contract is, or contains, a lease. The lease is characterized by a lease or transmission of the right to use for a fixed period in exchange for monthly payments. The leased asset must be clearly specified.

The Company determines in the initial recognition, the lease term or non-cancellable term, which will be used in the measurement of the right to use and the lease liability. The lease term will be reevaluated by the Company when a significant event or significant change occurs in the circumstances that are under the control of the lessee and affects the non-cancellable term. The Company adopts exemption from recognition, as provided for in the standard, for the lessee of contracts with terms of less than 12 (twelve) months, or whose underlying asset object of the contract is of low value.

At inception, the Company recognizes the right to use the asset and the lease liability at present value. The right-to-use asset should be measured at cost. The cost includes the lease liability, upfront costs, advance payments, estimated costs to dismantle, remove or restore. The lease liability is measured at the present value of the lease payments expected to be made during the life of the agreement, discounted at the implicit interest rate of the lease or, if the rate is not determinable, an incremental rate will be used to determine the present value.

For contracts that the Company determines the business rate, it is understood that this rate is the rate implied in nominal terms and to which it is applied in discounting the flow of future payments. In contracts with no rate definition, the Company applied the incremental loan rate, obtaining it through consultations with banks where it has a relationship, adjusted for the inflation forecast for the coming years.

For the subsequent measurement, the cost method to the right-of-use asset is used and, in depreciation, the requirements of IAS 16 - Property, Plant and Equipment are applied. However, for the purpose of depreciation, the Company determines the use of the straight-line method based on the remaining useful life of the assets or the term of the contract, whichever is the shorter.

The effects of PIS and COFINS recoverable generated after the effective payment of the obligations will be recorded as a reduction of the depreciation expenses of the right to use and of the financial expenses recognized monthly.

The IAS 36 - Impairment of Assets will also be applied in order to determine whether the right-of-use asset has impairment problems and to account for any impairment loss identified.

**18. TRADE PAYABLES**

	12/31/2021	12/31/2020	Consolidated
Trade payables	6,657,702		5,487,640
(-) Adjustment present value	(112,078)		(124,574)
	6,545,624		5,363,066

Classified:

Current	6,446,999		4,819,539
Non-current	98,625		543,527
	6,545,624		5,363,066

The Company classifies drawee risk operations with suppliers in other liabilities as per note 16. These are negotiated with financial institutions, by which suppliers anticipate receivables and, on the other hand, extend our payment terms. The effective prepayment of receivables depends on acceptance by the suppliers, given that their participation is not mandatory. The Company is not reimbursed and / or benefited by the financial institution for discounts for payment executed before the maturity date agreed with the supplier, there is no change in the degree of subordination of the security in the event of judicial execution, nor changes in the existing commercial conditions between Company and its suppliers.

Accounting Policy

They are initially recognized at fair value, and subsequently measured at amortized cost, using the effective interest rate method, and adjusted to present value when applicable, based on the estimated rate of the Company's cost of capital.

19. INCOME TAX AND SOCIAL CONTRIBUTIONS**19.a) Tax of income and social contribution recognized in profit or loss:**

The income tax and social contribution recognized in net income for the year are as follows:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Income tax and social contribution income (expense)			
Current	(4,240,802)	(2,052,204)	(1,564,622)
Deferred	(759,355)	1,426,696	2,398,400
Total	(5,000,157)	(625,508)	833,778

The reconciliation of income and social contribution expenses and income of the consolidated and the product of the current tax rate on income before income tax and social contribution are shown below:

	12/31/2021	12/31/2020	Consolidado 12/31/2019
Profit/(Loss) before income tax and social contribution	18,595,778	4,918,126	1,410,733
Tax rate	34%	34%	34%
Income tax and social contribution at combined statutory rate	(6,322,565)	(1,672,163)	(479,649)
Adjustment to reflect the effective rate:			
Equity in results of affiliated companies	71,833	28,391	46,737
Difference Tax Rate in companies abroad	(437,567)	(519,840)	(236,404)
Transfer price adjustment	(20,925)	(15,645)	(18,494)
Tax loss carryforwards without recognizing deferred taxes	(9,495)	(27,758)	(21,095)
Indebtdness limit	(6,260)	(25,087)	(20,393)
Unrecorded deferred taxes on temporary differences	3,181	5,142	(2,835)
Reversal for deferred income tax and social contribution credit	1,033,566	1,540,087	1,530,185
Income taxes and social contribution on foreign profit	(34,896)	(13,011)	(14,424)
Tax incentives	273,040	64,818	39,042
Interest on equity	185,325	17,177	22,107
Other permanent exclusions (additions) ⁽ⁱ⁾	264,606	(7,619)	(10,999)
Income tax and social contribution in net income for the year	(5,000,157)	(625,508)	833,778
Effective tax rate	27%	13%	-59%

(i) In September 2021 the Company recognized a credit for the unconstitutionality of the incidence of IRPJ and CSLL on amounts referring to the SELIC rate received due to the repetition of undue tax payment (see note 9).

19.b) Deferred income tax and social contribution

Deferred income tax and social contribution balances are as follows:

	Opening balance				Movement				Opening balance	Movement				Closing balance				
	12/31/2019				Shareholders' Equity				12/31/2020				Shareholders' Equity				12/31/2021	
					P&L				Reclassified				P&L				Others	
Deferred																		
Income tax losses	1,610,801				238,198				1,848,999				(311,376)				1,537,623	
Social contribution tax losses	610,046				78,162				688,208				(104,363)				583,845	
Temporary differences	(337,082)				(59,380)				1,110,336				5,029				718,903	
- Provision for tax, social security, labor, civil and environmental risks	264,013				15,136				279,149				(13,821)				265,328	
- Asset impairment losses	182,431				(26,444)				161,016				122,250				283,266	
- (Gains)/losses on financial instruments	414,495				(409,468)				5,027				1,457				6,484	
- Actuarial liability (pension and healthcare plan)	314,601				(44,732)				(7,412)				262,457				(66,019)	210,009
- Accrued supplies and services	132,411				22,041				154,452				9,168				163,620	
- Unrealized exchange variation ⁽¹⁾	2,774,085				(29,175)				2,744,910				(1,718,608)				1,026,302	
- Gain upon loss of control in Transnordestina	(92,180)								(92,180)								(92,180)	
- Cash flow hedge accounting	426,961				1,315,839				1,742,800				216,757				1,959,557	
- Acquisition at fair value of SWT and CBL	(184,513)				(57,651)				30,149				7,929				25,926	
- Deferred taxes not computed	(291,961)				(25,966)				(317,927)				69,322				(248,605)	
- (Losses) estimated /reversals to deferred taxes credits	(3,218,582)				(1,270,110)				1,548,640				(2,940,052)				1,915,039	
- Business Combination	(1,023,341)				8,292				(1,015,049)				(323,625)				(1,338,674)	
- Others	(35,502)				(2,726)				(15,457)				(53,685)				(269)	445,731
Total	1,883,765				(59,380)				1,426,696				5,029				3,256,110	
Total Deferred Assets	2,473,304								3,874,946								5,072,092	
Total Deferred Liabilities	(589,539)								(618,836)								(503,081)	
Total Deferred	1,883,765				(59,380)				1,426,696				5,029				3,256,110	

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

The Company has in its corporate structure subsidiaries abroad, whose income are taxed by the income tax in the respective countries where they were constituted at rates lower than those in force in Brazil. In the period between 2017 and 2021, these subsidiaries generated income in the amount of R\$611,234. If the Brazilian tax authorities understand that these profits are subject to additional taxation in Brazil for income tax and social contribution, these, if due, would reach approximately R\$203,454.

The Company, based on the position of its legal advisors, assessed only the likelihood of loss as possible in the event of possible tax questioning and, therefore, no provision was recognized in the financial statements.



In addition, management evaluated the precepts of IFRIC 23 - "Uncertainty Over Income Tax Treatments" and recognized in 2021 the credit for the unconstitutionality of the incidence of the IRPJ and CSLL on the amounts of default interest referring to the SELIC rate received due to the repetition of tax undue payment.

A sensitivity analysis of consumption of tax credits was carried out considering a variation in macroeconomic assumptions, operating performance, and liquidity events. Thus, considering the results of the study carried out, which indicates that it is probable the existence of taxable profit to use the balance of deferred income tax and social contribution.

The estimated recovery of deferred tax assets of IRPJ and CSLL are netted when referring to a single jurisdiction as shown in the table below:

	Consolidated
2022	2,331,239
2023	1,766,672
2024	702,525
2025	709,246
2026	429,565
Deferred asset	5,939,247
Deferred liabilities - Parent Company	(867,155)
Net deferred asset	5,072,092
Deferred liabilities - subsidiaries	(503,081)
Net deferred asset	4,569,011

19.c) Income tax and social contribution recognized in equity:

Income tax and social contribution recognized directly in equity are shown below:

	12/31/2021	Consolidated 12/31/2020
Income tax and social contribution		
Actuarial gains on defined benefit pension plan	104,532	170,604
Estimated losses for deferred income and social contribution tax credits - actuarial gains		(172,520)
Exchange differences on translating foreign operations	(325,350)	(325,350)
Cash flow hedge accounting	1,959,556	1,742,520
Estimated losses for deferred income and social contribution tax credits - cash flow hedge		(1,742,520)
total	1,738,738	(327,266)

Accounting Policy

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 expense is the expected payment of taxable income for the year, using the nominal rate approved or substantially approved on the balance sheet date, and any adjustment of taxes payable related to previous years. Current income tax and social contribution are posted net in liabilities whenever there are amounts payable, or in assets whenever such amounts paid in advance exceed the total amount due at the reporting date.

Deferred tax is recognized in relation to temporary differences between the tax bases of assets and liabilities and their book values in the financial statements. Deferred tax is not recognized for temporary differences arising from the initial recognition of assets and liabilities in a transaction that is not a business combination, that does not affect nor accounting profit nor tax profit or loss, differences related to investments in subsidiaries and controlled entities when it is probable that they will not revert in a foreseeable future and from the initial recognition of goodwill, in accordance with IAS 12 - Taxes on Profit. The amount of the deferred tax determined is based on the expectation of realization or settlement of the temporary difference and uses the nominal rate approved or substantially approved.

Assets and liabilities deferred income tax are presented net in the balance sheet whenever there is a legal right and the intention to offset them upon the calculation of current taxes, usually related to the same legal entity and the same taxation authority.

Deferred income tax and social contribution assets are recognized on recoverable balances of tax loss and negative basis of CSLL, tax credits and deductible temporary differences. Such assets are reviewed at each year-end date and will be reduced to the extent that their realization is less likely to occur.

19.d) Test of recoverability of income tax and social contribution of deferred assets

The Company's management constantly evaluates the ability to use its tax credits. In this sense, CSN periodically updates the technical study of the projection of future taxable results to support the realization of tax credits and, consequently, to base the accounting recognition of the 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 the level of the Entity in accordance with Brazilian tax legislation and is carried out considering the projections of The Company, which is the Entity that generates a significant amount of tax credits, especially for temporary differences. The Company exclusively covers the steel business.

Deferred income tax / social contribution on tax losses and temporary differences refers mainly to the following items:

	Nature	Brief description
	Tax losses	The Company incurred in tax losses in previous years as a result of financial expenses on its indebtedness, since it substantially holds all the loans and financing of the CSN Group. The Company reported taxable income in 2021 and in some quarters of 2020.
Differences Temporary	Foreign exchange variation expenses	Since 2012, the Company has opted for taxing exchange rate variations on a cash basis. As a result, taxes are due and expenses are deductible when the underlying asset or liability is settled.
	Other provisions	Other provisions are recognized on an accrual basis and their taxation occurs only at the time of their realization, such as: provision for contingencies, loss for impairment, provision for environmental liabilities, etc.

The study is prepared based on the Company's long-term business plan designed for a period reasonably estimated by Management and considers several scenarios that vary according to different macroeconomic and operational assumptions.

The taxable income projection model considers two main indicators:

- Income before taxes, reflecting the projected EBITDA plus depreciation, other income and expenses and the financial result, and;
- Taxable income, which is comprised of pre-tax income plus (minus) the items of income and expense that are taxable or deductible in future periods (temporary differences).

In addition, a sensitivity analysis of consumption of tax credits is carried out considering a variation in macroeconomic assumptions, operating performance, and liquidity events.

The Company has resumed high profitability indexes with sustainability and consequently maintains in the balance sheet the totality of its tax credits in the amount of R\$5,711 million and estimates that they will be fully used in 5 years.



The tax losses carryforward and negative base of social contribution and temporary differences maintained in the Company's tax records for future use amount, respectively, to R\$1,419 million and R\$531 million on December 31, 2021 (R\$1,681 million and R\$627 million on December 31, 2020), respectively.

20. TAXES IN INSTALLMENTS

The position of REFIS debts and other installments, recorded in installment taxes in current and non-current liabilities, as shown in note 16, are shown below:

	12/31/2021	12/31/2020
Federal REFIS Law 11.941/09 ^(a)	18,499	27,743
Federal REFIS Law 12.865/13 ^(b)	43,352	49,516
Other taxes in installments	142,568	128,319
	204,419	205,578
Classified:		
Current	51,999	45,331
Non-current	152,420	160,247
	204,419	205,578

(a) The refinancing program of Law 11,941 / 09 has a balance arising from the adhesion to the REFIS of taxes on profit (IRPJ and CSLL) for the years 2006, 2007 and 2012 and taxes on billing (PIS and COFINS) for the years 2006 and 2007. The installment payment is paid in monthly installments, with interest at the SELIC rate, which is the rate of the Brazilian federal funds.

(b) The refinancing program of Law 12.865 / 13 has a balance resulting from the adhesion to the REFIS of taxes on profit (IRPJ and CSLL) for the payment of the amounts related to taxes on the profit of the affiliates or subsidiaries abroad in 2009 to 2011. It is due in monthly installments, with interest at the SELIC rate, which is the rate of Brazilian federal funds.

21. PROVISIONS FOR TAX, SOCIAL SECURITY, LABOR, CIVIL, 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		Judicial deposits	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Tax	111,572	134,645	78,260	67,819
Social security	1,270	8,170		
Labor	304,744	328,334	218,200	212,737
Civil	139,824	151,776	17,869	17,683
Environmental	16,942	12,463	2,739	2,444
Deposit of a guarantee			22,737	24,434
	574,352	635,388	339,805	325,117
Classified:				
Current	66,047	81,073		
Non-current	508,305	554,315	339,805	325,117
	574,352	635,388	339,805	325,117

The changes in tax, social security, labor, civil and environmental provisions in the year ended December 31, 2021, can be summarized as follows:



Consolidated
Current + Non-current

Nature	12/31/2020	Additions	Accrued charges	Net utilization of reversal	Acquisition of Elizabeth	12/31/2021
Tax	134,645	2,296	5,942	(36,214)	4,903	111,572
Social security	8,170	17	25	(6,942)		1,270
Labor	328,334	38,171	30,929	(92,690)		304,744
Civil	151,776	3,264	21,261	(36,477)		139,824
Environmental	12,463	7,554	1,223	(4,298)		16,942
	635,388	51,302	59,380	(176,621)	4,903	574,352

The provision for tax, social security, labor, civil and environmental risks was estimated by Management and is mainly based on the legal counsel's assessment. Only lawsuits for which the risk is classified as probable loss are provisioned. Additionally, tax liability from actions initiated by the Company is included in this provision and is subject to SELIC (Central Bank's policy rate).

Tax proceedings

The main lawsuits that are considered by the external legal advisors as probable loss, which are part of CSN or its subsidiaries, of a tax nature, are (i) some tax assessment notices; (ii) divergences between calculated and paid ICMS; (iii) Requests for compensation not approved due to the lack of credit rights.

Labor proceedings

The Company appears as a defendant, on December 31, 2021, in 8,884 labor claims. The majority of claims for actions are related to subsidiary and / or joint liability, equal pay, unhealthy and hazardous work premiums, overtime, health insurance, indemnity claims arising from alleged involvement of occupational diseases or accidents at work, intra-day break and differences in profit sharing in the years 1997 to 1999 and 2000 to 2003.

During the year ended December 31, 2021, 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 proceedings

Among the civil lawsuits in which he is a defendant, there are mainly suits for damages. Such processes, in general, result from work accidents, occupational diseases, contractual discussions, related to the Group's industrial activities, real estate actions, health insurance.

Environmental Proceedings

The main environmental lawsuits that are considered by the external legal advisors to be probable losses, to which CSN or its subsidiaries are a party, are (i) administrative infraction notices, for alleged environmental violations; (ii) judicial annulment actions and tax foreclosures, arising from environmental fines; (iii) procedural fines for alleged non-compliance with court orders.

Among the environmental administrative / judicial proceedings in which the Company is a defendant, there are administrative procedures aimed at finding possible occurrences of environmental irregularities and regularizing environmental licenses; at the judicial level, there are actions for the enforcement of fines imposed as a result of such alleged irregularities and public civil actions with a request for regularization combined with indemnities, which consist of environmental recomposition, in most cases. Such processes, in general, result from discussions of alleged impact to the environment related to the Company's industrial activities.

Administrative and judicial proceedings

The Company does not make provisions for lawsuits, which Management's expectation, based on the opinion of legal counsel, is a possible loss. The following table shows a summary of the balance of the main matters classified as possible risk compared to the balance on December 31, 2021 and 2020.

	<u>12/31/2021</u>	<u>Consolidated</u> <u>12/31/2020</u>
Assessment Notice and imposition of fine (AIIM) / Tax Enforcement - Income tax and social contribution - Capital gain on sale of NAMISA's shares	13,015,938	12,694,021
Assessment Notice and Imposition of fine (AIIM) / Tax Enforcement - Income tax and Social contribution - Disallowance of deductions of goodwill generated in the reverse incorporation of Big Jump by NAMISA.	4,242,051	3,930,093
Assessment Notice and Imposition of fine (AIIM) / Tax Enforcement - Income tax and Social contribution - Disallowance of interest on prepayment arising from supply contracts of iron ore and port services	2,017,602	1,956,898
Assessment Notice and imposition of fine (AIIM) - Income tax and social contribution due to profits from foreign subsidiaries for years 2008, 2010, 2011, 2012, 2014, 2015 and 2016.	4,137,519	3,461,574
ICMS - SEFAZ/RJ - Electricity Credits	867,521	841,401
Offset of taxes that were not approved by the Federal Revenue Service - IRPJ/CSLL, PIS/COFINS and IPI	1,660,888	1,845,379
ICMS - SEFAZ/RJ - Disallowance of the ICMS credits - Transfer of iron ore	614,528	624,645
ICMS - Refers to the transfer of imported raw material at an amount lower than the price disclosed in the import documentation	326,361	317,848
Disallowance of the tax loss and negative basis of social contribution arising from the adjustments in the SAPLI	600,895	583,478
Assessment Notice and imposition of fine (AIIM)/ Action for annulment - IRRF- Capital Gain of CFM vendors located abroad	266,649	260,326
CFEM – difference of understanding between CSN and ANM on the calculation basis	1,079,951	1,051,661
ICMS - SEFAZ/RJ - Assessment Notice - questions about sales for incentive area	1,142,386	1,111,034
Other tax lawsuits (federal, state, and municipal)	3,877,976	3,886,976
Assessment Notice and imposition of fine (AIIM) - Charge of IRRF- RFB - Business Combinations of CSN Mineração held in 2015.	889,179	862,324
ICMS - SEFAZ/RJ - Disallowance of credits on acquisitions of Intermediate Products	562,307	498,002
Assessment Notice and imposition of fine (AIIM) - RFB - Disallowance of credits PIS/COFINS of inputs and freight	1,116,228	1,082,517
Social security lawsuits	214,323	233,116
Action to discuss the balance of the construction contract – Tebas	507,719	487,124
Action related to power supply payment's charge - Light	324,371	288,390
Indemnity action due to the supply contract termination - Indumill ⁽¹⁾		237,795
Enforcement action applied by Brazilian antitrust authorities (CADE)	98,740	95,833
Civil Public Action - Districts / School / Nursery relocation-CdP Dam	14,876	12,207
Other civil lawsuits	845,043	777,850
Labor and social security lawsuits	1,536,967	1,506,626
Tax foreclosures – Fine – Volta Redonda IV	104,400	94,304
ACP landfill Márcia	306,389	306,389
Other environmental lawsuits	424,143	257,965
	<u>40,794,949</u>	<u>39,305,776</u>

(1) The indemnity lawsuit filed by Indumill in the amount of R\$267 million was definitively dismissed, with a favorable decision for CSN, resulting in the closing of the case and the write-off of the risk amounts.

In the first quarter of 2021, the Group was notified of an arbitration procedure based on an alleged unfulfillment of iron ore supply contracts. The counterparty asks for approximately US\$1 billion and the Company has no knowledge of the basis used in the allegations presented, as well as has no knowledge of the basis for the estimates of the amount asked. As opposed, the Company understands to be a creditor in the contracts. Finally, the Company informs that has responded the arbitration requirements in conjunction with its legal counselors and is currently at the initial stage of its defense. The Company expects the arbitration will be concluded in 2 to 3 years. The relevance of the arbitration to the Company is related to the amount attributed to the cause and its eventual financial impact. The discussion involves arbitration disputes initiated by both parties.



The Company has been offering judicial guarantees (Guarantee Insurance / Letter of Guarantee) in the total amount updated to December 31, 2021, of R\$4,732,009 (December 31, 2020 R\$ 4,542,786), as determined by the procedural legislation in force.

The assessments made by legal advisors define these administrative and judicial proceedings as a possible risk of loss and, consequently, no loss provisions have been recognized in accordance with Management's judgment and with the Accounting Practices adopted in Brazil.

Accounting Policy

Only provisions estimated as probable risk of loss are recorded, substantiated in the assessment of our legal advisors, and at amounts that will be required to settle the litigations. The obligation is updated in accordance with the evolution of the lawsuit or financial charges incurred and will be reversed if the estimated loss is no longer considered probable due to changes in circumstances or derecognized when the obligation is settled.

22. PROVISION FOR ENVIRONMENTAL LIABILITIES AND ASSET RETIREMENT OBLIGATIONS

The balance of provisions for environmental liabilities and deactivation of assets can be shown as follows:

	<u>12/31/2021</u>	<u>Consolidated</u> <u>12/31/2020</u>
Environmental liabilities	173,647	192,830
Asset retirement obligations ⁽¹⁾	724,950	611,005
	<u>898,597</u>	<u>803,835</u>

(1) On January 31, 2021, the provision for asset retirement obligation – ARO was transferred to the subsidiary CSN Cimentos S.A.

22.a) Environmental liabilities

As of December 31, 2021, a provision is maintained for application in expenses related to services for the investigation and environmental recovery of potential contaminated, degraded areas and in the process of exploration under the responsibility of the Company in the states of Rio de Janeiro, Minas Gerais, and Santa Catarina. Expenditure estimates are periodically reviewed, adjusting, whenever necessary, the amounts already accounted for. These are the Management's best estimates considering studies and environmental recovery projects. These provisions are recorded in the account for other operating expenses.

Provisions are measured at the present value of the expenses that must be required to settle the obligation, using a pre-tax rate, which reflects current market valuations of money at the time and the specific risks of the obligation. The increase in the obligation due to the passage of time is recognized as other operating expenses.

Some contingent environmental liabilities are monitored by the environmental area and have not been provisioned because their characteristics do not meet the recognition criteria in IAS 37.

22.b) Asset retirement obligation

The Company realized its most recent study in 2020, anticipating the discontinuation of the dams used in its mining activities, the Company also updated the study for recognition of the costs with decommissioning of mining assets. Subsequent remeasurement includes the reversal of the present value adjustment.

Accounting Policy

The Company recognizes a provision for recovery costs when a loss is probable and the amounts of the related costs are reasonably determined. Generally, the provisioning period for the amount to be used for recovery coincides with the completion of a feasibility study or commitment to a formal action plan.

Expenses related to compliance with environmental regulations are charged to income or capitalized, as appropriate. Capitalization is considered appropriate when expenses refer to items that will continue to benefit the Company and that are basically relevant to the acquisition and installation of equipment for pollution control and / or prevention.

Asset retirement obligation (ARO) liabilities consist of cost estimates for deactivation, demobilization, or restoration of areas at the end of mining activities and extraction of mineral resources. The initial measurement is recognized as a liability discounted to present value and, subsequently, carried to expenses over time. The asset deactivation cost equivalent to the initial liability is capitalized as part of the asset's carrying amount and is depreciated over the asset's useful life.

23. RELATED-PARTY BALANCES AND TRANSACTIONS

23.a) Transactions with holding companies

Vicunha Aços SA is shareholder of the Company with a 50.65% interest in the voting capital.

Also, part of the Company's control is Rio Iaco Participações SA, which holds a 3.41% interest in the voting capital of CSN.

The corporate structure of Vicunha Aços SA is as follows:

- a) Vicunha Steel S.A. - holds 67.93% interest in Vicunha Aços S.A.;
- b) CFL Participações S.A. - holds a 12.82% interest in Vicunha Aços S.A. and a 40% interest in Vicunha Steel S.A.;
- c) Rio Purus Participações S.A. - holds a 19.25% interest in Vicunha Aços S.A. and a 60% interest in Vicunha Steel S.A.

Liabilities

The Company's Board of Directors at a meeting held on July 27, 2021, approved the distribution of dividends to shareholders on income generated until June 30, 2021, in the amount of R\$861,641 to shareholder Vicunha Aços S.A and R\$57,956 to Rio Iaco Participações S.A., corresponding to R\$1.26801069070972 per share, which were paid in August 2021. Additionally, on December 29, 2021, the Board of Directors approved the payment to shareholders of interest on equity in the amount of R\$129,839 to shareholder Vicunha Aços S.A and R\$8,723 to Rio Iaco Participações S.A., corresponding to R\$0.19150790423 per share, after withholding income tax, the value per share is R\$0.16278171860. The interest on equity will be paid to shareholders until May 30, 2022.

After the anticipations, the remaining balance destined as minimum mandatory dividends amounted to R\$458,070 to the shareholder Vicunha Aços S.A and R\$30,811 to Rio Iaco Participações S.A., which will be submitted for approval at the General Meeting.

23.b) Transactions with subsidiaries, joint ventures, associates, exclusive funds and other related parties

	12/31/2021				Consolidated 12/31/2020				
	Subsidiaries and associates	Joint-ventures and Joint Operation	Other related parties	Total	Subsidiaries and associates	Joint-ventures and Joint Operation	Other related parties	Total	
Assets									
Current Assets									
Investments	(1)		2,579,990	2,579,990			3,763,603	3,763,603	
Trade receivables (note 7)	(2)	8,159	1,667	134,570	144,396	7,686	8	113,482	121,176
Dividends (note 10)	(3)		61,898	14,980	76,878		38,088		38,088
Loans (note 10)	(4)		4,511		4,511				
Other current assets (note 10)				1,828	1,828		4,413	1,829	6,242
		8,159	68,076	2,731,368	2,807,603	7,686	42,509	3,878,914	3,929,109
Noncurrent Assets									
Investments	(1)			132,523	132,523			123,409	123,409
Loans (note 10)	(4)	3,626	1,139,602		1,143,228	3,375	962,675		966,050
Actuarial asset (note 10)				59,111	59,111			13,819	13,819
Other non-current assets (note 10)	(5)		927,077		927,077		664,020		664,020
		3,626	2,066,679	191,634	2,261,939	3,375	1,626,695	137,228	1,767,298
		11,785	2,134,755	2,923,002	5,069,542	11,061	1,669,204	4,016,142	5,696,407
Liabilities									
Current Liabilities									
Trade payables		21	62,730	14,712	77,463		106,946	9,455	116,401
Accounts payable (note 16)			28,442		28,442		23,555	2,437	25,992
Provision for consumption (note 16)			22,182		22,182		44,466		44,466
		21	113,354	14,712	128,087		174,967	11,892	186,859
Noncurrent Liabilities									
Accounts payable (note 16)			66,607		66,607		78,083		78,083
Actuarial liability (note 16)								79,546	79,546
			66,607		66,607		78,083	79,546	157,629
		21	179,961	14,712	194,694		253,050	91,438	344,488

	12/31/2021				Consolidated 12/31/2020				
	Subsidiaries and associates	Joint-ventures and Joint Operation	Other related parties	Total	Subsidiaries and associates	Joint-ventures and Joint Operation	Other related parties	Total	
P&L									
Sales		274,978	2,250	3,244,017	3,521,245	104,400	843	1,568,992	1,674,235
Cost and expenses		(1,065)	(1,273,740)	(119,500)	(1,394,305)		(1,036,420)	(104,212)	(1,140,632)
Financial income (expenses)									
Interest (note 29)		251	49,293	32,246	81,790		19,095	18,421	37,516
Short-term investments				94,866	94,866			1,190,489	1,190,489
		274,164	(1,222,197)	3,251,629	2,303,596	104,400	(1,016,482)	2,673,690	1,761,608

1. Financial investments

In the consolidated financial statements refers to Investments in Usiminas shares of R\$2,383,059 (R\$3,305,109 in December 2020) and cash and cash equivalents with Banco Fibra totaling R\$196,931 in December 2021 (R\$458,494 in December 2020) and no current amount R\$132,523 (R\$123,409 in December 2020) from Bonds with an average rate of 98% to 115% of the CDI.

2. Trade receivable mainly refers to operations of sales of steel products to other unconsolidated related parties.

Dividend'sreceivable:

3. dividends from Usiminas R\$14,980 (nil on December 31, 2020) and from MRS Logística in the amount of R\$61,898 (R\$38,088 on December 31, 2020)

Loans (Assets):

4. Short-term: refers mainly to loan agreements with Equimac S.A. at a fixed rate of 4.0% p.a. + 100.00% of CDI of R\$4,511.
Long-term: refers mainly to loan agreements with Transnordestina Logística R\$1,123,375 (R\$962,675 as of December 31, 2020) at an average rate of 125% to 130% p.a. of the CDI, loans at a fixed rate of 130% of the CDI with Arvedi Metafer S.A. of R\$3,626 and loans at a fixed rate of 4.0% p.a.+ 100% of the CDI with Equimac S.A. of R\$16,227.

5. Others (Assets): Advance for future capital increase with subsidiaries Transnordestina Logística S.A in the amount of R\$927,076 (R\$664,020 on December 31, 2020).

6. Loans (Liabilities):

Foreign currency: Intercompany contracts in the amount of R\$9,591.868 on December 31, 2021 (R\$15,069,614 on December 31, 2020).



23.c) Other unconsolidated related parties

· CBS Social Security

The Company is its main sponsor, being a non-profit civil society established in July 1960 and whose main objective is the payment of benefits complementary to those of the official social security for the participants. As a sponsor, it maintains transactions for payment of contributions and recognition of actuarial liabilities determined in defined benefit plans.

· Banco Fibra

Banco Fibra is under the control structure of Vicunha Aços S.A., the major shareholder 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.

· CSN Foundation

The Company develops socially responsible policies concentrated today in the CSN Foundation, of which it is the founder. Transactions between the parties are related to operational and financial support for the Foundation to conduct social projects developed mainly in the locations where it operates.

· Related Parties under the control of a member of the Company's Management

The following companies are under the control of a member of the Management, which maintain some minor transactions with the Company:

- Partifib Projetos Imobiliários Ltda
- Vicunha Imóveis Ltda.
- Vicunha Serviços Ltda.
- Ibis Participações e Serviços Ltda
- Party Negócios e Participações Ltda;
- Jockey Club de São Paulo;
- Fibra Sequoia Guarulhos Empreendimentos.

23.d) Key management personal

The key management personnel with authority and responsibility for planning, directing, and controlling the Company's activities include members of the Board of Directors and statutory officers. The following is information on the compensation of such personnel and the related balances as of December 31, 2021, 2020 and 2019.

Key management personnel compensation

	12/31/2021	P&L	12/31/2020	12/31/2019
Short-term benefits for employees and officers	46,747		40,522	37,452
Post-employment benefits	192		111	109
Key management personnel compensation	46,939		40,633	37,561

23.e) Guarantees

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



	Currency	Maturities	Borrowings		Tax foreclosure		Others		Total	
			12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Transnordestina Logística	R\$	Up to 09/19/2056 and Indefinite	2,486,926	2,478,105	12,627	35,496	3,384	3,298	2,502,937	2,516,899
CSN Cimentos	R\$	Up to 11/26/2023 and indefinite					33		33	
Cia Siderúrgica Nacional	R\$	05/31/2025					536		536	
Cia Metalúrgica Prada	R\$	Indefinite			197	196	244	244	441	440
CSN Energia	R\$	Up to 11/26/2023 and indefinite					1,920	1,920	1,920	1,920
CSN Mineração	R\$	Up to 12/21/2024	846,284	846,749					846,284	846,749
CBS	R\$	06/30/2024					21		21	
Estanho de Rondônia	R\$	7/15/2022	771	1,154					771	1,154
Minérios Nacional S.A.	R\$	Up to 09/10/2021		1,946						1,946
Total in R\$			3,333,981	3,327,954	12,824	35,692	6,138	5,462	3,352,943	3,369,108
CSN Inova Ventures	US\$	01/28/2028	1,300,000	1,300,000					1,300,000	1,300,000
CSN Islands XII	US\$	Perpetual		1,000,000						1,000,000
CSN Resources	US\$	Up to 04/17/2026	1,450,000	1,525,000					1,450,000	1,525,000
CSN Cimentos	US\$	Indefinite					1,025		1,025	
Total in US\$			2,750,000	3,825,000			1,025		2,751,025	3,825,000
Lusosider Aços Planos	EUR	Indefinite					75,000		75,000	
Total in EUR							75,000		75,000	
Total in R\$			15,346,375	19,877,378	12,824	35,692	479,795	5,462	15,826,170	19,877,378
			18,680,356	23,205,332	12,824	35,692	485,933	5,462	19,179,113	23,246,486

Accounting Policy

Transactions with related parties were carried out by the Company on terms equivalent to those prevailing in market transactions, observing the price and the usual market conditions. Therefore, these transactions are in conditions that are no less favorable for the Company than those negotiated with third-parties.

Transactions between the related parties are eliminated and adjusted to ensure consistency with the practices adopted by The Company.

The Company's related parties are subsidiaries, joint ventures, affiliates, shareholders and their related companies and the key personnel of the Company's management.

24. SHAREHOLDERS' EQUITY

24.a) Paid-in capital

The fully subscribed and paid-in capital on December 31, 2021 was R\$10,240 million (on December 31, 2020 - R\$6,040 million) is divided into 1,387,524,047 common and book-entry shares, with no par value. Each common share entitles its holder to one vote in the resolutions of the General Meetings.

The Board of Directors, at a meeting held on March 9, 2022, approved the capitalization of part of the income reserve, in the amount of R\$4,200 million, without changing the number of shares, increasing the Company's capital to R\$10,240 million.

24.b) Authorized capital

The Company's bylaws in effect on December 31, 2021, define that the share capital may be increased to up to 2,400,000,000 shares, by decision of the Board of Directors.

24.c) Legal Reserve

It is constituted at the rate of 5% of the net income calculated in each fiscal year pursuant to art. 193 of Law 6.404/76, up to a limit of 20% of the capital stock.

24.d) Ownership structure

As of December 31, 2021 and 2020, the Company's ownership structure was as follows:

	12/31/2021			12/31/2020		
	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%	50.65%	679,522,254	48.97%	49.24%
Rio Iaco Participações S.A. (*)	45,706,242	3.29%	3.41%	58,193,503	4.19%	4.22%
NYSE (ADRs)	250,564,538	18.06%	18.67%	248,763,533	18.90%	19.00%
Other shareholders	365,941,013	26.38%	27.27%	393,635,257	27.41%	27.55%
Outstanding shares	1,341,734,047	96.70%	100.00%	1,380,114,547	99.47%	100.00%
Treasury shares	45,790,000	3.30%		7,409,500	0.53%	
Total shares	1,387,524,047	100.00%		1,387,524,047	100.00%	

(*) Controlling group companies.

24.e) Treasury shares

As of December 31, 2021, the position of treasury shares was as follows:

Program	Board's Authorization	Authorized quantity	Program period	Average buyback price	Minimum and maximum buyback price	Number bought back	Sale of shares	Balance in treasury
	04/20/2018	30,391,000	From 4/20/2018 to 4/30/2018	Not applicable	Not applicable		22,981,500	7,409,500
1º	06/21/2021	24,154,500	From 06/22/2021 to 12/22/2021	R\$ 21.82	R\$20.06 and R\$23.22	24,082,000		31,491,500
2º	6/12/2021	30,000,000	From 12/07/2021 to 6/30/2022	R\$ 24.70	R\$23.94 and R\$25.45	14,298,500		45,790,000

Quantity purchased (in units)	Amount paid for the shares	Share price			Share market price as of 12/31/2021 (*)
		Minimum	Maximum	Average	
45,790,000	R\$ 936,930	R\$ 4.48	R\$ 25.45	R\$ 18.13	R\$ 1,144,292

(*) The average share price on December 31, 2021, was used in the amount of R\$24.99 per share.

24.f) Earnings per share

The earnings per share are shown below:

	12/31/2021	12/31/2020	12/31/2019
Profit for the year	12,258,628	3,794,295	1,789,067
Weighted average number of shares	1,376,362,149	1,380,114,547	1,380,114,547
Basic and diluted earnings per share	8.90654	2.74926	1.29632

Accounting Policy**Share Capital**

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction from the amount raised, net of taxes.

Earnings/(loss) per share

Basic earnings per share is calculated using the net income for the year attributable to the Company's controlling shareholders and the weighted average number of outstanding common shares in the respective period. Diluted earnings per share is calculated using the aforementioned average of outstanding shares, adjusted by instruments potentially convertible into shares, with a dilutive effect, in the periods presented. The Company does not have potential instruments convertible into shares and, consequently, the diluted and basic earnings per share are the same.

Treasury shares

When the Company purchases shares of the capital stock of the Company itself (treasury shares), the amount paid, including any directly attributable additional costs (net of income tax), is deducted from the shareholders' equity attributable to the shareholders of the Company until the shares are canceled or reissued. When such shares are subsequently reissued, any amounts received, net of any directly attributable additional transaction costs and the respective income tax and social contribution effects, are included in the shareholders' equity attributable to the Company's shareholders.

Result per share

Basic and diluted earnings / loss per share was calculated based on the profit attributable to CSN's controlling shareholders divided by the weighted average number of common shares outstanding during the period, excluding common shares purchased and held as treasury shares. The Company does not hold potentially dilutable common shares in circulation that could result in the dilution of earnings per share.

Non-controlling interest and transactions

The Company considers transactions with non-controlling interests as transactions with owners of the Company's assets. For non-controlling interests, the difference between any consideration paid and the acquired portion of the carrying amount of the subsidiary's net assets is recorded in the shareholders' equity. Gains or losses on disposals for non-controlling interests are also recorded directly in shareholders' equity.

When the Company ceases to have control, any interest held in the entity is remeasured at fair value, with the change in book value recognized in the income statement. The fair value is the initial carrying amount for the subsequent accounting of the retained interest in an associate, a joint venture, or a financial asset. In addition, any amounts previously recognized in other comprehensive income related to that entity are accounted for as if the Company had directly disposed of the related assets or liabilities. This means that the amounts previously recognized in other comprehensive income are reclassified to income.

25. Shareholders' Compensation

The Company's Bylaws provide for the distribution of minimum dividends of 25% of the adjusted net income in accordance with the law, to the holders of their shares. Dividends are calculated in accordance with the bylaws and the Joint Stock Company Act.

The profit destination for 2021 is shown below:

		<u>12/31/2021</u>
Profit for the year		12,258,628
Capital reserve	5%	<u>(612,931)</u>
Profit for allocation		11,645,697
Mandatory minimum dividends ⁽ⁱ⁾	25%	(2,911,424)
Statutory reserve		(8,734,273)

(i) Of the total mandatory minimum dividend, in the amount of R\$2,911,424, the Company's Board of Directors, in a meeting held on July 27, 2021, approved the distribution of dividends to shareholders, as an anticipation of the mandatory minimum dividend based on the net income generated until June 30, 2021, in the amount of R\$1,750,000, corresponding to R\$1.26801069070972 per share, which had already been paid by year-end. Additionally, on December 29, 2021, the Board of Directors approved the payment to shareholders, also as an anticipation of the minimum mandatory dividend, of interest on equity in the amount of R\$256,953, based on net income generated until November 30, 2021, corresponding to the amount of R\$ 0.19150790423 per share, before taxes, which will be paid to shareholders until May 30, 2022. Thus, the remaining balance of the minimum mandatory dividend, in the amount of R\$904,471, as shown in the table below, will be deliberated at the Company's Annual General Meeting.



Nature	Approval	Amount	R\$/per share
Anticipated Dividends	BoD 07/27/2021	1,750,000	1.26801069070972
Interest on equity	BoD 12/29/2021	256,953	0.19150790423
Mandatory minimum dividends		904,471	0.67410640690
		2,911,424	

At the Annual General Meeting, will be realized on April 29, 2022, the proposal for allocation of profits presented in the financial statements will be deliberated.

Accounting Policy

The Company adopts a profit distribution policy which, in compliance with the provisions of Law No. 6,404 / 76 as amended by Law No. 9,457 / 97, will imply the allocation of all net income to its shareholders, provided that the following priorities are preserved, regardless of its order: (i) business strategy; (ii) compliance with obligations; (iii) making the necessary investments; and (iv) the maintenance of a good financial situation for the Company.

In accordance with article 33 of the Company's Bylaws, at least 25% of the net income for the year, adjusted under the terms of article 202 of Law No. 6,404 / 76, will be distributed as dividends in each fiscal year, which will be reflected in current liabilities. In addition, the Board of Directors may pay interest on net equity by allocating the amount of interest paid or credited to the minimum mandatory dividend mentioned above. If the Company reports a dividend higher than the mandatory minimum in the allocation proposal, this amount is highlighted in a specific account in shareholders' equity under "Proposed Additional Dividend".

26. NET REVENUE FROM SALES

Net sales revenue is as follows:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Gross revenue			
Domestic market	29,724,648	16,652,801	14,220,420
Foreign market	25,090,313	17,396,259	14,663,297
	54,814,961	34,049,060	28,883,717
Deductions			
Sales returns, discounts and rebates	(272,842)	(248,821)	(325,794)
Taxes on sales	(6,630,080)	(3,736,219)	(3,121,506)
	(6,902,922)	(3,985,040)	(3,447,300)
Net revenue	47,912,039	30,064,020	25,436,417

Accounting Policy

a) Nature of goods and services.

The Company generates revenue from (i) the production and sale of steel, cement and iron ore, (ii) the provision of maritime freight services, in the case of iron ore export sales, and rail and port logistics services and (iii) sales of energy.

b) Timing of revenue recognition.

The Company recognizes revenue once all of the following conditions are satisfied:

1. Identification of the contract for sale of goods or provision of services;
2. Identification of the performance obligations;
3. Determination of the contract value;



4. Determination of the value allocated to each performance obligation included in the contract; and
5. Revenue recognition over time or at the time the performance obligations are completed.

In the case of sales of goods, performance obligations are usually completed upon delivery of the goods to the destination specified by customers, which may be customers' warehouses or, in the case of iron ore export sales, when the product is loaded on the ship. In certain cases, judgment may be required to determine when performance obligations are completed, based on the following indicators:

- I. Whether the customer has the significant risks and rewards of ownership and has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good; and
- II. Whether the customer has a present obligation to pay in accordance with the terms of the sales contract.

Accordingly, the Company discloses revenue from each of its business segments as follows:

Steel:

The Company recognizes revenues from sales of steel products when control of the product passes to customers, which may be either upon delivery of the goods to the destination specified by customers or when the customer picks up the goods for delivery, depending on whether the customer contracts logistics services from the Company.

Cement:

The Company recognizes revenues from sales of cement when control of the product passes to customers, which may be either upon delivery of the goods to the destination specified by customers or when the customer picks up the goods for delivery, depending on whether the customer contracts logistics services from the Company.

Mining:

The Company recognizes revenues from sales of iron ore when control of the product passes to customers, which generally occurs, in the case of export sales, when the product is loaded on the ship and, in the case of domestic sales, when the product is loaded on the train.

Iron ore export sales pursuant to the Incoterms "Cost, Insurance and Freight – CIF" and "Cost and Freight – CFR" include maritime freight service embedded in the same invoice. In this case, the performance obligation of the maritime freight service is considered separately from the shipment of iron ore and the Company recognizes revenue from the provision of this service upon delivery of the goods to the destination specified by customers.

Logistics:

Rail logistics services. The Company's rail logistics services are provided by its subsidiary Ferrovia Transnordestina Logística S.A. ("FTL"). The Company recognizes revenues from rail logistics services when the performance obligation, which is the contracted service, is completed, which occurs upon delivery of the goods to the destination specified by customers.

Port logistics services. The Company's port logistics services, which comprise handling of containers and storage, are provided by its subsidiary Sepetiba Tecon S.A. ("TECON"). The Company recognizes revenues from port logistics services when the performance obligation is completed. In the case of handling of containers, the performance obligation comprises the pool of services contracted. In the case of storage services, each month of storage represents a performance obligation and, consequently, the Company recognizes revenue on a monthly basis.

Energy:

The Company recognizes revenues from sales of energy that it has not used in its operations. This excess energy is made available through the public network and the Chamber of Electric Energy Commercialization (Câmara de Comercialização de Energia Elétrica), which is the governmental agency responsible for managing the network, redirects the energy to the electric system and, on a monthly basis, informs the Company of the amount of energy that was redirected to the electric system. Accordingly, the Company issues its invoice to this governmental agency and simultaneously recognizes the revenue from the sale of energy.

The Company's only variable consideration arises when iron ore is provisionally priced and there is a difference with the final price, which depends on future index prices. In this case, the Company initially recognizes revenue based on the applicable forward market price and then accounts for any eventual adjustment based on the final price. The period between provisional pricing and final invoicing is typically between 60 and 120 days.

Where the Company has contracts with unfulfilled performance obligations at the end of a fiscal period, it discloses the transaction price allocated to these performance obligations. The Company does not disclose this information for contracts with an expected duration of one year or less.

The Company presents revenues on a consolidated basis in its income statement and by segment in the explanatory note 30 - Segment Information.

c) Payment terms.

Generally, all sales of goods and provisions of services are payable within 30 days of the invoice date.

27. EXPENSES BY NATURE

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Raw materials and inputs	(10,405,028)	(6,928,517)	(7,287,933)
Outsourcing material	(4,476,702)	(2,281,619)	(1,981,547)
Labor cost	(2,746,454)	(2,716,104)	(2,807,280)
Supplies	(2,297,069)	(2,003,761)	(1,981,547)
Maintenance cost (services and materials)	(1,268,752)	(1,096,358)	(1,340,135)
Outsourcing services	(2,119,515)	(1,832,081)	(2,392,626)
Freight	(52,967)	(204,932)	(334,509)
Distribution freight	(1,782,634)	(1,421,079)	(1,787,979)
Depreciation, amortization and depletion	(2,114,681)	(2,421,458)	(1,421,704)
Others	(1,533,119)	(727,867)	(763,421)
	(28,796,921)	(21,633,776)	(20,117,134)
Classified as:			
Cost of sales	(25,837,475)	(19,124,901)	(17,263,264)
Selling expenses	(2,372,298)	(2,004,417)	(2,342,805)
General and administrative expenses	(587,148)	(504,458)	(511,065)
	(28,796,921)	(21,633,776)	(20,117,134)

The depreciation, amortization and depletion additions for the year were distributed as follows.

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Production costs ⁽¹⁾	(2,075,488)	(2,374,046)	(1,385,306)
Selling expenses	(11,227)	(13,978)	(11,539)
General and administrative expenses	(27,966)	(33,434)	(24,859)
	(2,114,681)	(2,421,458)	(1,421,704)
Other operational ⁽²⁾	(97,725)	(95,270)	(97,627)
	(2,212,406)	(2,516,728)	(1,519,331)

(1) (i) The Company's iron ore extraction in 2020 started using dry waste filtering and stacking in 100% of its production process. As a normal consequence of the operation, the use of dams has become obsolete, and consequently, the assets of dams reached the end of their useful lives on December 31, 2020. As a result of the technical and functional obsolescence of the dams, the book balance of these assets in their entirety, (R\$515,491), was fully depreciated in 2020 and appropriated to the cost of production.

(ii) The cost of production includes PIS and COFINS credits on lease agreements on December 31, 2021, in the amount of R\$5,786 (R\$5,335 on December 31, 2020.) in the consolidated.

(2) They mainly refer to the depreciation of investment properties, paralyzed equipment and amortization of the SWT Client Portfolio, see note 28.

28. OTHER OPERATING INCOME AND EXPENSES

	12/31/2021	12/31/2020	<u>Consolidated</u> 12/31/2019
Other operating income			
Receivables by indemnity ⁽¹⁾	13,646	245,945	56,180
Rentals and leases	11,688	9,096	9,462
Dividends received	26,600	1,197	32,747
PIS, COFINS and INSS to compensate ⁽²⁾	236,000	120,452	123,677
Contractual fines	1,468	4,783	4,486
Actuarial pension plan		55,695	47,151
Updated shares – Fair value through profit or loss (Note 15)	109,254	12,579	
Contractual agreement			131,817
Net gain in shares sale (note 11 c) ⁽³⁾	2,472,497		
Other revenues	87,219	32,747	98,250
	<u>2,958,372</u>	<u>482,494</u>	<u>503,770</u>
Other operating expenses			
Taxes and fees	(109,693)	(46,338)	(95,873)
Expenses with environmental liabilities, net	(8,789)	16,151	(82,669)
Write-off/(Provision) of judicial lawsuits	(25,063)	(130,869)	(19,685)
Contractual fines			(106,926)
Depreciation of investment property, equipment paralyzed and amortization of intangible assets (note 27)	(97,725)	(95,270)	(97,627)
Write-off of PPE, intangible assets and investment property (notes 12 and 13)	(112,886)	(13,130)	(114,603)
Estimated (Loss)/reversal in inventories	(138,779)	(179,012)	(136,827)
Idleness in stocks and paralyzed equipment ⁽⁴⁾	(37,609)	(303,975)	(546,968)
Studies and project engineering expenses	(77,059)	(27,137)	(26,171)
Research and development expenses	(355)	(620)	(1,741)
Healthcare plan expenses	(31,989)	(117,193)	(119,560)
Cash flow hedge accounting realized (note 15) ⁽⁵⁾	(553,018)	(1,951,035)	(790,353)
Updated shares – Fair value through profit or loss (Note 15 II)			(118,780)
Actuarial pension plan	(48,068)		
Other expenses	(474,999)	(421,628)	(149,068)
Expenses	<u>(1,716,032)</u>	<u>(3,270,056)</u>	<u>(2,406,851)</u>
Other operating income (expenses), net	<u>1,242,340</u>	<u>(2,787,562)</u>	<u>(1,903,081)</u>

- In 2020, the Company received R\$84,435 of indemnity after a court decision, of which R\$58,785 for rent arrears arising from one of its investment properties and R\$25,650 relating to an action for the collection of insurance for material damage caused by contractor in the construction of the long steel plant. Additionally, in June 2020, the principal amount was recognized in the amount of R\$147,612 of receivables for indemnity (see note 9).
- In 2021, it is the exclusion of ICMS from the PIS and COFINS tax base and 2020, consist of the recovery of INSS credit on benefits granted to employees that should not be considered in the contribution calculation basis. In 2019, this is the exclusion of ICMS from the PIS and COFINS calculation basis.
- Refers to the initial public offering of shares of CSN Mineração S.A. (see note 11.c).
- In 2020 refers to the idle capacity arisen from production volumes lower than normal it was generated from the refurbishment of the blast furnace No.3 and in the iron ore mining operation due to delays in the release of environmental licenses, which postponed the start of new ore mining fronts, as well as new dry tailing processes still in ramp-up stage.
- Refers to the effects of the Foreign Exchange Cash Flow Hedge (R\$525,290) and Cash Flow Hedge of the Platts index (R\$27,728), totaling R\$553,018. On December 31, 2020 (R\$1,951,035), the effects are from the Exchange cash flow hedge (R\$1,667,886) and the Cash flow hedge of the "Platts" index (R\$283,149).

29. FINANCIAL INCOME (EXPENSES)

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Financial income			
Related parties (note 23 b)	93,862	51,124	79,228
Income from financial investments	279,467	58,061	93,471
Updated shares – Fair value through profit or loss (Note 15 II) ⁽¹⁾	385,297	1,190,489	
Other income ⁽²⁾	408,558	503,054	206,343
Financial income	1,167,184	1,802,728	379,042
Financial expenses			
Borrowings and financing - foreign currency (note 14)	(1,590,120)	(1,600,973)	(1,128,520)
Borrowings and financing - local currency (note 14)	(503,849)	(401,079)	(867,785)
Related parties (note 14)	(12,072)	(13,608)	(14,939)
Lease liabilities	(59,260)	(50,804)	(49,118)
Capitalised interest (notes 12 and 34)	87,414	92,506	117,189
Interest and fines	(199,566)	(290,673)	(158,794)
(-) Adjustment present value of trade payables	(265,495)	(139,566)	
Commission, bank fees, Guarantee and bank fees	(145,129)	(162,085)	(217,784)
PIS/COFINS over financial income	(88,897)	(39,149)	(25,176)
Other financial expenses	(380,154)	(270,764)	(217,864)
Financial expenses	(3,157,128)	(2,876,195)	(2,562,791)
Others financial items, net			
Foreign exchange and monetary variation, net	46,199	392,971	47,579
Gains and (losses) on exchange derivatives (*)	(439)	(115,815)	4,986
Others financial	45,760	277,156	52,565
Financial income (expenses)	(3,111,368)	(2,599,039)	(2,510,226)
Financial income (expenses), net	(1,944,184)	(796,311)	(2,131,184)
(*) Statement of gains and (losses) on derivative transactions (note 15)			
Dollar - to - real NDF	37,322		
Exchange rate swap Dollar x Euro	7,119	(9,070)	783
Exchange rate swap GBP x Euro		(602)	
Interest rate swap CDI x IPCA	(34,920)		
Exchange rate swap CDI x Dollar	(9,960)	(106,143)	4,203
Total	(439)	(115,815)	4,986

(1) It refers to the appreciation of Usiminas' shares in the amount of R\$1,190,489 as of December 31, 2020. As of December 31, 2019, Usiminas' shares were reclassified to financial investments and their pricing fluctuation started to be recognized in the financial result.

(2) It mainly refers to the recognition of the exclusion of ICMS in the PIS and COFINS calculation base in the amount of R\$81,758 on December 31, 2020 (R\$160,609 on December 31, 2019), and updating in the amount of R\$369,571 of receivables for indemnity (see note 9).

30. SEGMENT INFORMATION

According to the Company'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, Stahlwerk Thüringen (SWT), which is based in Germany, produces long steels and is specialized in the production of shapes used for construction.

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 on 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., a company with mining units and tin casting, in the state of Rondônia.

· Logistics

i. Railway

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 for the former Malha Nordeste by RFFSA. The northeastern railway system covers 4,238 km of railway network divided into two sections: i) Mesh I, which integrates the sections of São Luiz - Mucuripe, Arrojado - Recife, Itabaiana - Cabedelo, Paula Cavalcante - Macau - and Propriá - Jorge Lins (Mesh I); and ii) Malha II, which includes the sections of Missão Velha - Salgueiro, Salgueiro - Trindade, Trindade - Eliseu Martins, Salgueiro - Porto de Suape and Missão Velha - Porto de Pecém.

In addition, it connects to the main ports in the region, thereby offering an important competitive advantage through opportunities for combined transport solutions and tailor-made logistics projects.

ii. Port

The port logistics segment consolidates the terminal's operation from Sepetiba built after the port modernization law (Law 8.630/1993) that allowed the transfer of port activities to the private sector. The Sepetiba terminal has a complete infrastructure to meet all the needs of exporters, importers, and shipowners. Its installed capacity exceeds that of most Brazilian terminals. It has cribs and a large storage area, as well as the most modern and adequate equipment, systems, and intermodal connections.

The Company's constant investment in terminal projects consolidates the Itaguaí Port Complex as one of the most modern in the country.

· Energy

CSN is one of the largest industrial consumers of electric energy in Brazil. As energy is fundamental in its production process, the Company invests in electricity generation assets to guarantee its self-sufficiency. These assets are: Itá Hydroelectric Plant, located in the State of Santa Catarina, with a capacity of 1,450 MW, in which CSN participates with 29.5%; Igarapava Hydroelectric Plant, located in Minas Gerais, with a capacity of 210 MW, in which CSN holds 17.92% of the capital; and the Thermoelectric Cogeneration Plant CTE#1, CTE#2 and the TRT - Top Recovery Turbine, with installed capacity of 10 MW, 235 MW and 22 MW respectively, in operation at the Presidente Vargas Steelworks, which uses waste gas from the steel production itself as fuel.

· Cement

The Cement segment, which operates through CSN Cimentos, consolidates the production, marketing and distribution of cement, using in the Southeast operations the slag that is produced by the blast furnaces of the Presidente Vargas plant itself, in Volta Redonda/RJ.

The Company has intensified its strategy of expanding its business to new regions, and the first step was taken with the acquisition of Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda. which, with operations in the Northeast region, adds 1.3 Mtpa of cement production capacity, totaling 6.0 Mtpa.

The cement production occurs in Arcos/MG, in Volta Redonda/RJ and in Alhandra/PB ("Elizabeth"). The process is done by grinding the main raw materials which include clinker, limestone, gypsum, and slag. The total installed capacity for cement production is 6.0 million tons per year, of which 2.4 million tons in Arcos, 2.3 million tons in Volta Redonda and 1.3 million tons in Alhandra.

The clinker used in the process in the Southeast plants is produced at the Arcos plant, which has an installed capacity of 2.8 million tons per year. The clinker is transported from Arcos to Volta Redonda preferably by rail. The Alhandra operation in the Northeast is also 100% integrated: the plant has a limestone mine and a clinker kiln with an installed capacity of 1 million tons, which supply the entire need for these inputs for cement production.

The types of Portland cement produced are CP III (blast furnace Portland cement) and CP II, (compound Portland cement) according to ABNT NBR 16697 standard, which can be sold in bagged and bulk form.

· 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.

Results by segment

For the purpose of preparing and presenting the information by business segment, Management decided to maintain the proportional consolidation of the joint ventures as historically presented. For purposes of reconciliation of the consolidated result, the amounts recorded by these companies are not included in the "Corporate expenses/elimination" column.

P&L							12/31/2021	
	Steel	Mining	Logistics		Energy	Cement	Corporate expenses/elimination	Consolidated
			Port	Railroads				
Net revenues								
Domestic market	21,400,318	3,114,385	311,040	1,839,307	222,785	1,430,150	(5,084,155)	23,233,830
Foreign market	8,691,130	14,929,001					1,058,078	24,678,209
Cost of sales and services (note 27)	(20,081,043)	(7,705,835)	(220,494)	(1,266,112)	(146,349)	(892,900)	4,475,259	(25,837,475)
Gross profit	10,010,405	10,337,551	90,546	573,195	76,436	537,250	449,182	22,074,564
General and administrative expenses (note 27)	(1,158,748)	(351,371)	(33,853)	(135,091)	(32,083)	(190,986)	(1,057,314)	(2,959,446)
Other operating (income) expenses, net (note 28)	(405,018)	(287,744)	(8,290)	58,253	41,337	(63,631)	1,907,433	1,242,340
Equity in results of affiliated companies (note 11)							182,504	182,504
Operating result before Financial Income and Taxes	8,446,639	9,698,436	48,403	496,357	85,690	282,633	1,481,805	20,539,962
Sales by geographic area								
Asia		12,627,913					1,058,078	13,685,991
North America	2,275,612							2,275,612
Latin America	355,912							355,912
Europe	6,059,606	2,301,088						8,360,694
Foreign market	8,691,130	14,929,001					1,058,078	24,678,209
Domestic market	21,400,318	3,114,385	311,040	1,839,307	222,785	1,430,150	(5,084,155)	23,233,830
Total	30,091,448	18,043,386	311,040	1,839,307	222,785	1,430,150	(4,026,077)	47,912,039
12/31/2020								
P&L	Steel	Mining	Logistics		Energy	Cement	Corporate expenses/elimination	Consolidated
			Port	Railroads				
Net revenues								
Domestic market	11,721,339	1,532,589	256,371	1,489,647	172,859	857,197	(3,143,789)	12,886,213
Foreign market	4,881,556	11,150,642				995	1,144,614	17,177,807
Cost of sales and services (note 27)	(14,170,692)	(5,531,763)	(187,860)	(1,094,130)	(128,227)	(647,132)	2,634,903	(19,124,901)
Gross profit	2,432,203	7,151,468	68,511	395,517	44,632	211,060	635,728	10,939,119
General and administrative expenses (note 27)	(922,862)	(179,806)	(21,949)	(114,970)	(30,243)	(88,232)	(1,150,813)	(2,508,875)
Other operating (income) expenses, net (note 28)	(392,061)	(665,881)	(5,420)	52,569	(2,967)	(44,893)	(1,728,909)	(2,787,562)
Equity in results of affiliated companies (note 11)							71,755	71,755
Operating result before Financial Income and Taxes	1,117,280	6,305,781	41,142	333,116	11,422	77,935	(2,172,239)	5,714,437
Sales by geographic area								
Asia		7,461,791					1,144,614	8,606,405
North America	922,299							922,299
Latin America	327,900					995		328,895
Europe	3,627,011	3,688,851						7,315,862
Others	4,346							4,346
Foreign market	4,881,556	11,150,642				995	1,144,614	17,177,807
Domestic market	11,721,339	1,532,589	256,371	1,489,647	172,859	857,197	(3,143,789)	12,886,213
Total	16,602,895	12,683,231	256,371	1,489,647	172,859	858,192	(1,999,175)	30,064,020

								12/31/2019
	Steel	Mining	Logistics		Energy	Cement	Corporate expenses/elimination	Consolidated
			Port	Railroads				
Net revenues								
Domestic market	10,027,999	926,836	240,451	1,321,355	325,343	570,805	(2,462,088)	10,950,701
Foreign market	3,921,033	9,100,813					1,463,870	14,485,716
Cost of sales and services (Note 27)	(12,962,861)	(4,396,247)	(173,344)	(1,030,210)	(266,754)	(607,719)	2,173,871	(17,263,264)
Gross profit	986,171	5,631,402	67,107	291,145	58,589	(36,914)	1,175,653	8,173,153
General and administrative expenses (Note 27)	(834,977)	(186,189)	(34,560)	(109,770)	(29,034)	(91,466)	(1,567,874)	(2,853,870)
Other operating (income) expenses, net (note 28)	(1,055,190)	(218,009)	(3,860)	147,155	(1,486)	(40,630)	(731,061)	(1,903,081)
Equity in results of affiliated companies (note 11)							125,715	125,715
Operating result before Financial Income and Taxes	(903,996)	5,227,204	28,687	328,530	28,069	(169,010)	(997,567)	3,541,917
Sales by geographic area								
Asia	2,980	6,742,946					1,463,870	8,209,796
North America	767,977							767,977
Latin America	169,036							169,036
Europe	2,978,994	2,357,867						5,336,861
Others	2,046							2,046
Foreign market	3,921,033	9,100,813					1,463,870	14,485,716
Domestic market	10,027,999	926,836	240,451	1,321,355	325,343	570,805	(2,462,088)	10,950,701
Total	13,949,032	10,027,649	240,451	1,321,355	325,343	570,805	(998,218)	25,436,417

Accounting Policy

An operating segment is a component of the Company committed to business activities, from which it can earn revenue and incur expenses, including income and expenses related to transactions with any other components of the Company. All operating results of operating segments are regularly reviewed by CSN's Executive Board to make decisions about the resources to be allocated to the segment and to evaluate its performance, and for which different financial information is available.

31. EMPLOYEE BENEFITS

The pension plans granted cover substantially all employees. The plans are managed by Caixa Beneficente dos Empregados de CSN ("CBS"), a private, non-profit pension fund established in July 1960, which has as members (and former employees) who have joined the fund, through a membership agreement, in addition to CBS employees themselves. The CBS Executive Board is made up of a president and two directors, all appointed by CSN, the main sponsor of CBS. The Deliberative Council is the decision-making and superior guidance body of CBS, composed of the president and ten members, six of them chosen by CSN and four of them elected by the participants.

Until December 1995, CBS Previdência managed two defined benefit plans based on years of service, salary, and social security benefits. On December 27, 1995, the then Supplementary Pension Secretariat ("SPC") approved the implementation of a new benefit plan, effective as of that date, called the Supplementary Benefit Mixed Plan ("Mixed Plan"), structured under the form of a variable contribution plan, which has been closed to new members since September 2013. As of that date, all new employees must join the CBSPrev Plan, structured in the form of defined contribution, also created in September 2013.

The CBS guarantee funds are mainly invested in repo operations (backed by federal government bonds), federal government bonds indexed to inflation, stocks, loans and real estate. As of December 31, 2021, CBS held 3,486,252 CSN common shares (4,450,652 as of December 31, 2020). The entity's total guarantee resources totaled R \$ 5.8 billion on December 31, 2021 (R\$5.7 billion on December 31, 2020). CBS fund managers seek to combine plan assets with long-term benefit obligations to be paid. Pension funds in Brazil are subject to certain restrictions related to their ability to invest in foreign assets and, consequently, the funds invest primarily in securities in Brazil.

Guarantee Funds are considered to be the available and investment assets of the Benefit Plans, not including the amounts of debts contracted with sponsors.

For defined benefit plans, called "35% of Average Salary" and "Supplementary Average Salary Plan", the Company maintains a financial guarantee with CBS Previdência, the entity that manages the aforementioned plans, in order to maintain the financial balance and actuarial, should any future actuarial loss or actuarial gain occur.



In compliance with current legislation, specific to the pension fund market, for the last 4 years ended (2018, 2019, 2020 and 2021), there was no need to pay installments by CSN, since the benefit plans defined actuarial gains in the year.

31.a) Description of pension plans

Plan of 35% of the average salary

This plan started on February 1, 1966, and is a defined benefit plan, the purpose of which is to pay retirement benefits (length of service, special, disability or old age) for life, equivalent to 35% of the adjusted average of the last 12 salaries of the participant. The plan also guarantees the payment of sickness benefit to the participant licensed by the Official Social Security and also guarantees the payment of savings, death, and monetary assistance. This plan was deactivated on October 31, 1977, when the plan to supplement the average salary came into effect.

Average salary supplementation plan

This plan started on November 1, 1977, and is a defined benefit plan. Its objective is to complement the difference between the corrected average of the last 12 wages of the participant and the benefit of the Official Social Security for retirements, also for life. As with the 35% plan, there is coverage for sickness benefit, death benefit and pension benefits. This plan was deactivated on December 26, 1995, with the creation of the mixed supplementary benefit plan.

Mixed supplementary benefit plan

Started on December 27, 1995, it is a variable contribution plan. In addition to the programmed retirement benefit, payment of risk benefits (active pension, disability and sickness / accident benefits) is also provided. In this plan, the retirement benefit is calculated based on what was accumulated by the monthly contributions of the participants and the sponsors, as well as the option of each participant in the form of receiving the same, which can be for life (with or without continuity of pension for death) or by a percentage applied to the balance of the benefit-generating fund (loss for an indefinite period). After retirement, the plan will have the characteristic of a defined benefit plan, if the participant has opted to receive his benefit in the form of lifetime monthly income. This plan was deactivated on September 16, 2013, when the CBSPrev plan came into effect.

CBS Prev Plan

On September 16, 2013, the new CBSPrev pension plan began, which is a defined contribution plan. In this plan, the retirement benefit is determined based on what has been accumulated by the monthly contributions of participants and sponsors. The option of each participant to receive it can be: (a) receive a part in cash (up to 25%) and the remaining balance, through monthly income for a percentage applied to the benefit generating fund, not being applicable to death pension benefits, (b) receive only monthly income for a percentage applied to the benefit generating fund.

With the creation of the CBSPrev plan, the Mixed Supplementary Benefit Plan was deactivated for the entry of new participants as of September 16, 2013.

CBSPREV Namisa Plan

It is a Defined Contribution plan with risk benefits during the activity (projection of the balances in case of disability or death and sickness / accident benefits). It has been in operation since January 6, 2012, when it was created to serve exclusively 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 SA

In this plan, all benefits offered are calculated based on what has been accumulated by 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 has been closed to the entry of new participants since July 2017 and in 2020 the plan's extinction process was finalized due to the total withdrawal of sponsorship.



31.b) Investment policy

The investment policy establishes the principles and guidelines that should govern the investment of resources entrusted to the entity, with the objective of promoting the security, liquidity and profitability necessary to ensure the balance between the plan's assets and liabilities, based on the ALM study (Asset Liability Management), which considers the benefits of the participants and beneficiaries of each plan.

The investment plan is reviewed annually and approved by the Deliberative Council, considering a 5-year horizon, as established by CGPC resolution no. 7, of December 4, 2003. The investment limits and criteria established in the policy are based on Resolution 4,661 / 18, published by the National Monetary Council ("CMN").

31.c) Employee benefits

The actuarial calculations are updated, at the end of each year, by external actuaries and presented in the financial statements in accordance with IAS 19 - Employee Benefits.

	12/31/2021		12/31/2020		Consolidated	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020
	Actuarial asset		Actuarial liabilities			
Benefits of pension plans	(59,111)	(13,819)			79,546	
Post-employment healthcare benefits			584,288		678,880	
	(59,111)	(13,819)	584,288		758,426	

The reconciliation of assets and liabilities of employee benefits is presented below:

	12/31/2021		12/31/2020		Consolidated	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2019	12/31/2019
Present value of defined benefit obligation	3,151,609	3,645,822			3,581,460	
Fair value of plan assets	(3,584,244)	(3,766,194)			(3,894,488)	
Deficit(Surplus)	(432,635)	(120,372)			(313,028)	
Restriction to actuarial assets due to recovery limitation	373,524	186,099			319,102	
Liabilities (Assets), net	(59,111)	65,727			6,074	
Liabilities		79,546			19,788	
Assets	(59,111)	(13,819)			(13,714)	
Net (assets) recognized in the balance sheet	(59,111)	65,727			6,074	

The change in the present value of the defined benefit obligation is shown below:

	12/31/2021		12/31/2020		Consolidated	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2019	12/31/2019
Present value of obligations at the beginning of the year	3,645,822	3,581,460			3,087,433	
Cost of service	1,253	968			1,093	
Interest cost	231,009	236,551			283,487	
Participant contributions made in the period	1,398	1,998			2,126	
Benefits paid	(283,393)	(278,960)			(269,995)	
Actuarial loss/(gain)	(444,480)	103,805			477,316	
Present value of obligations at the end of the year	3,151,609	3,645,822			3,581,460	

The change in the fair value of the plan's assets is shown below:



	12/31/2021	12/31/2020	Consolidated 12/31/2019
Fair value of plan assets at the beginning of the year	(3,766,193)	(3,894,488)	(3,403,906)
Interest income	(238,534)	(257,946)	(314,102)
Benefits Paid	283,393	278,960	269,995
Participant contributions made in the period	(1,398)	(1,998)	(2,127)
Return on plan assets (less interest income)	138,488	109,279	(444,348)
Fair value of plan assets at the end of the year	(3,584,244)	(3,766,193)	(3,894,488)

The composition of the amounts recognized in the income statement is shown below:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Cost of current service	1,253	968	1,093
Interest cost	231,009	236,551	283,487
Expected return on plan assets	(238,534)	(257,946)	(314,102)
Interest on the asset ceiling effect	11,985	21,737	21,502
Total costs / (income), net	5,713	1,310	(8,020)

The (cost) / revenue is recognized in the income statement under other operating expenses.

The movement of actuarial gains and losses is shown below:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Actuarial losses and (gains)	(444,480)	103,805	477,316
Return on plan assets (less interest income)	138,488	109,279	(444,348)
Change in the asset's limit (excluding interest income)	175,440	(154,741)	73,039
Total cost of actuarial losses and (gains)	(130,552)	58,343	106,007

The breakdown of actuarial gains and losses is shown below:

	12/31/2021	12/31/2020	Consolidated 12/31/2019
Loss due to change in demographic assumptions		67,930	
Loss due to change in financial assumptions	(647,564)	(30,454)	472,715
Loss due to experience adjustments	203,084	66,329	4,601
Return on plan assets (less interest income)	138,488	109,279	(444,348)
Change in the asset's limit (excluding interest income)	175,440	(154,741)	73,039
Actuarial losses and (gains)	(130,552)	58,343	106,007

The main actuarial assumptions used were as follows:

	12/31/2021	12/31/2020
Actuarial financing method	Projected unit credit	Projected unit credit
Functional currency	Real (R\$)	Real (R\$)
Recognition of plan assets	Fair value	Fair value
Nominal discount rate	Millennium Plan: 10.71% Plan 35%: 10.53% Supplementation : 10.54%	Millennium Plan: 6.95% Plan 35%: 6.24% Supplementation: 6.44%
Inflation rate	5.03%	3.32%
Nominal salary increase rate	6.08%	4.35%
Nominal benefit increase rate	5.03%	3.32%
Rate of return on investments	Millennium Plan: 10.71% Plan 35%: 10.53% Supplementation : 10.54%	Millennium Plan: 6.95% Plan 35%: 6.24% Supplementation: 6.44%
General mortality table	Millennium Plan: AT-2012 segregated by gender Plan 35%: AT-2000 Male aggravated by 15% Supplementation: AT-2000 aggravated by 10% segregated by gender	Millennium Plan: AT-2012 segregated by gender Plan 35%: AT-2000 Male aggravated by 15% Supplementation: AT-2000 aggravated by 10% segregated by gender
Disability table	35% Plan Light Medium. Millennium Plan: Prudential (-10%) Supplementation: not applicable	35% Plan Light Medium. Millennium Plan: Prudential (-10%) Supplementation: not applicable
Disability mortality table	Millennium Plan: AT-71 35% Plan : MI-2006 -10% M&F Supplementation: Winklevoss -10%	Millennium Plan: AT-71 35% Plan : MI-2006 -10% M&F ; Supplementation: Winklevoss -10%
Turnover table	Millennium plan 5% per annum, zero for plans 35% and Supplementation	Millennium 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 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

The assumptions regarding the mortality table are based on published statistics and mortality tables. These tables translate into an average life expectancy in years for employees aged 65 and 40:

	Plan covering 35% of the average salary		Average salary supplementation plan		Mixed supplementary benefit plan (Milênio Plan)	
	12/31/2021	12/31/2020	12/31/2021	12/31/2020	12/31/2021	12/31/2020
Longevity at age of 65 for current participants						
Male	18.38	18.38	18.75	18.75	21.47	21.47
Female	18.38	18.38	21.41	21.41	23.34	23.34
Longevity at age of 40 for current participants						
Male	40.15	40.15	40.60	40.60	44.07	44.07
Female	40.15	40.15	44.41	44.41	46.28	46.68

Allocation of plan assets:

	12/31/2021		12/31/2020		12/31/2019	
Variable income	195,032	5.44%	54,285	1.44%	25,236	0.65%
Fixed income	3,127,736	87.26%	3,438,735	91.31%	3,607,398	92.63%
Real estate	190,474	5.31%	182,145	4.84%	183,098	4.70%
Others	71,002	1.98%	91,028	2.42%	78,756	2.02%
Total	3,584,244	100.00%	3,766,193	100.00%	3,894,488	100.00%

The assets invested in variable income are mainly invested in CSN shares.

Fixed income assets are mainly composed of debentures, Interbank Deposit Certificates ("CDI") and National Treasury Notes ("NTN-B").

Real estate refers to buildings valued by a specialized asset appraisal company. There are no assets in use by CSN and its subsidiaries.



For the pension plan, the expense in 2021 was R\$1,616 (R\$2,032 on December 31, 2020).

31.d) Expected contributions

There are no expected contributions that will be paid to the defined benefit plans 35% and Supplementation in 2021.

For the mixed supplementary benefit plan, the expected contributions in the amount of R\$23,578 will be paid in 2021 for the defined contribution portion and R\$1,377 for the defined benefit portion (risk benefits).

31.e) Sensitivity analysis

The quantitative sensitivity analysis in relation to significant assumptions, for pension plans on December 31, 2021, is shown below:

	12/31/2021					
	Plan covering 35% of the average salary		Average salary supplementation plan		Mixed supplementary benefit plan (Milênio Plan)	
Assumption: Discount rate						
Sensitivity level	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations	(1,005)	1,084	(5,507)	5,954	(4,758)	5,309
Effect on present value of obligations	(16,114)	17,381	(85,515)	92,456	(68,287)	76,188
Assumption: Salary growth						
Sensitivity level	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations					191	(181)
Effect on present value of obligations					1,079	(1,030)
Assumption: Mortality table						
Sensitivity level	0.5%	-0.5%	0.5%	-0.5%	0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations	120	(120)	623	(623)	430	(430)
Effect on present value of obligations	1,928	(1,928)	9,669	(9,669)	5,975	(5,975)
Assumption: Benefit adjustment						
Sensitivity level	+1 year	- 1 year	+1 year	- 1 year	+1 year	- 1 year
Effect on current service cost and on interest on actuarial obligations	850	(839)	4,382	(4,362)	1,562	(1,541)
Effect on present value of obligations	13,626	(13,455)	68,039	(67,726)	22,603	(22,306)

Following are the expected benefits for future years for defined benefit plans:

Forecast payments

Year 1	303,855
Year 2	289,600
Year 3	282,546
Year 4	275,174
Year 5	267,521
Next 5 years	1,220,994
Total forecast payments	2,639,690

31.f) Post-Employment Health Plan

It refers to the health plan created on December 1, 1996, exclusively to cover former retired employees, pensioners, amnesties, ex-combatants, widows of labor accident victims and retirees until March 20, 1997 and their respective legal dependents. Since then, the health plan has not allowed the inclusion of new beneficiaries. The Plan is sponsored by CSN.

The amounts recognized in the balance sheet were determined as follows:



	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Present value of obligations	584,288	678,880	892,396
Liabilities	<u>584,288</u>	<u>678,880</u>	<u>892,396</u>

The reconciliation of health benefit liabilities is presented below:

	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Actuarial liability at the beginning of the year	678,880	892,396	897,137
Expenses recognized in income for the year	42,355	57,731	69,907
Sponsor's contributions transferred in prior year	(73,324)	(81,340)	(82,081)
Recognition of actuarial loss/(gain)	<u>(63,623)</u>	<u>(189,907)</u>	<u>7,433</u>
Actuarial liability at the end of the year	<u>584,288</u>	<u>678,880</u>	<u>892,396</u>

The actuarial gains and losses recognized in equity are shown below:

	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Gain/(loss) recognized in shareholders' equity	(63,623)	(189,907)	7,433

Below is the weighted average life expectancy based on the mortality table used to determine the actuarial obligations:

	<u>12/31/2021</u>	<u>12/31/2020</u>
Longevity at age of 65 for current participants		
Male	20.24	20.24
Female	20.24	20.24
Longevity at age of 40 for current participants		
Male	42.74	42.74
Female	42.74	42.74

The actuarial assumptions used to calculate post-employment health benefits were:

	<u>12/31/2021</u>	<u>12/31/2020</u>
Biometric and Demographic		
General mortality table	AT 2000 segregated by gender 20%	AT 2000 segregated by gender 20%
Financial		
Actuarial nominal discount rate	10.55%	6.53%
Inflation	5.03%	3.32%
Real increase in medical costs based on age (Aging Factor)	0.5% - 3.00% real p.a.	0.5% - 3.00% real p.a.
Nominal increase medical costs growth rate	4.10%	4.10%
Average medical cost (Claim cost)	1,011.42	913.00

31.g) Sensitivity analysis

The quantitative sensitivity analysis for significant assumptions for the post-employment health benefit as of December 31, 2021, is shown below:

12/31/2021

		Healthcare Plan	
		Assumption: Discount rate	
Sensitivity level		0.5%	-0.5%
Effect on current service cost and on interest on actuarial obligations		559	(608)
Effect on present value of obligations		(20,842)	22,545
		Assumption: Medical Inflation	
Sensitivity level		1.0%	-1.0%
Effect on current service cost and on interest on actuarial obligations		5,291	(4,599)
Effect on present value of obligations		50,127	(43,572)
		Assumption: Benefit adjustment	
Sensitivity level		+1 year	- 1 year
Effect on current service cost and on interest on actuarial obligations		3,880	(3,669)
Effect on present value of obligations		36,763	(34,763)

Following are the expected benefits for future exercises for post-employment health benefit plans:

Forecast benefit payments	
Year 1	65,814
Year 2	63,130
Year 3	60,377
Year 4	57,534
Year 5	54,598
Next 5 years	227,586
Total forecast payments	529,039

Accounting Policy

Employee benefits - long term

A defined contribution plan is a post-employment benefit plan under which the Company pays contributions to CBS, obligations for contributions to defined contribution pension plans are recognized as employee benefit expenses in the income statement during the periods during which they are paid. Services are provided by employees. In this modality, the Company will have no legal or constructive obligation to pay additional amounts, as the risks fall on employees.

In the defined benefit plan, obligations are assessed annually by independent actuaries, the unit credit method is used in the calculation, the assumptions for the calculation include biometric, demographic, financial and economic assumptions. The discount rate is applied to define the present value of the defined benefit obligations, the fair value of the assets is also determined. The amount recognized in the Company's balance sheet is the net of obligations after the discount rate less the fair value of the assets.

When the calculation results in a benefit to the Company, the asset to be recognized is limited to the total of any past unrecognized service costs and the present value of the economic benefits available in the form of future plan reimbursements or reduction in future plan contributions. Actuarial gains and losses resulting from defined benefit plans immediately in other comprehensive income. In the event of extinction of the plan, the accumulated actuarial gains and losses are recorded in income.

Short-term employee benefits

Payments of benefits such as salary or vacation, as well as the respective labor charges on these benefits are recognized monthly in the income statement, respecting the accrual basis.

Employees 'profit sharing and executives' variable remuneration are linked to the achievement of operational and financial goals. The Company recognizes a liability and an expense substantially when these goals are achieved by allocating them to the cost of production or operating expenses.

32. COMMITMENTS

32.a) Take-or-pay contracts

As of December 31, 2021, and 2020, the Company was a party to take-or-pay contracts as shown in the following table:

Type of service	Payments in the period					After 2024	Total
	2020	2021	2022	2023	2024		
Transportation of iron ore, coal, coke, steel products, cement and mining products.	946,865	1,351,564	1,483,615	1,552,730	1,605,777	2,895,525	7,537,647
Supply of power, natural gas, oxygen, nitrogen, argon and iron ore pellets.	1,044,380	1,546,308	1,508,336	388,863	370,132	2,039,360	4,306,691
Processing of slag generated during pig iron and steel production.	75,863	73,983	46,833	41,973	6,334	0	95,140
Manufacturing, repair, recovery and production of ingot casting machine units.	7,674	3,499	0	0	0	0	0
Oil Storage and Handling	1,900	2,489	2,666	2,666	666	0	5,998
Labor and consultancy services	32,279	33,375	35,526	35,526	35,526	167,416	273,994
	2,108,961	3,011,218	3,076,976	2,021,758	2,018,435	5,102,301	12,219,470

32.b) Projects and other commitments

Transnordestina project

The Transnordestina project corresponds to the 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 54% progress which was expected to completion for 2017, completion period currently under discussion with the responsible agencies.

The Company expects that the investments will allow Transnordestina Logística SA ("TLSA"), the concessionaire that owns the Transnordestina Project, to transport various products, such as iron ore, limestone, soybeans, cotton, sugar cane, fertilizers, oil and fuels. The concession period ends in 2057 and may be terminated before that period if the concessionaire reaches the minimum return agreed with the Government. TLSA has obtained the environmental authorizations required and implementation is advanced in certain regions.

The sources of financing for the project are: (i) financing granted by Banco do Nordeste / FNE and BNDES, (ii) debentures issued by FDNE, (iii) Via Permanente use contracts and (iv) capital contribution by CSN and public shareholders. The approved investment for the work is R\$ 7,542,000, and the balance of funds to be disbursed will be updated by the IPCA as of the April 2012 base date. If additional resources are needed, they will be made possible by CSN and / or third parties through the execution of Permanent Use of Contracts.

The approved budget amount is composed as follows: Missão Velha - Salgueiro amounting to R\$ 0.4 billion, Salgueiro - Trindade amounting to R\$ 0.7 billion, Trindade - Eliseu Martins amounting to R\$ 2.4 billion, Missão Velha - Port of Pecém amounting to R\$ 3 billion, Salgueiro - Port of Suape amounting to R\$ 4.7 billion, totaling R\$ 11.2 billion. The project is currently in the process of budgetary adjustment whose proposed budget is in the order of R\$ 13.2 billion.

The Company guarantees 100% of the financing obtained by TLSA from Banco do Nordeste / FNE and BNDES, as well as 50.97% of the debentures issued by the FDNE (considers 48.47% of corporate guarantee, 1.25% of letter of guarantee) for BNB and 1.25% corporate guarantee for BNB). Under the terms of the FDNE regulation approved by Federal Decree No. 6,952 / 2009, as well as the Investment Agreement signed with public shareholders / financiers, up to 50% of the debentures may be converted into shares of TLSA.

The Federal Audit Court - TCU, through a precautionary decision issued in May 2016, referring to the TC 012.179 / 2016 process, suspended new transfers of public funds to TLSA by Valec Engenharia, Construções e Ferrovias SA, Fundo de Investimento do Nordeste - FINOR, Constitutional Financing Fund for the Northeast - FNE, Development Fund for the Northeast - FDNE, National Bank for Economic and Social Development - BNDES and BNDES Participações SA - BNDESPar. After the appeal against the precautionary decision and the necessary explanations were provided, in June 2016, the preliminary decision issued by the TCU was revoked unanimously by the members of this court, and the continuity of the programmed contributions was restored.

By means of a new precautionary decision issued in January 2017, referring to case TC 012.179 / 2016, the Federal Court of Accounts - TCU suspended new transfers of public funds to TLSA by Valec Engenharia, Construções e Ferrovias SA, Fundo de Investimento do Nordeste - FINOR, Constitutional Financing Fund for the Northeast - FNE, Development Fund for the Northeast - FDNE, National Bank for Economic and Social Development - BNDES and BNDES Participações SA - BNDESPar. The Company has been providing the necessary clarifications to TCU and acting firmly so that the decision will be revoked soon, and the flow of programmed contributions will be reestablished.

The Company concluded in December 2019, according to the schedule, the engineering deliveries referring to the review of the projects of the sections to be executed, as well as the survey of the services already performed in the sections in progress and concluded ("as built"), in order to allow the validation of the regulatory budget and the preparation of a revisited schedule.

There is an administrative procedure before the National Transportation Agency ("ANTT") that assesses the regular compliance with the Concession Agreement obligations by the Company. In this context, in 2020, ANTT proposed to the Federal Government the declaration of the expiry of the TLSA Concession Contract and the initiation of an administrative proceeding within the scope of the Superintendence of Infrastructure and Railway Cargo Transport Services - SUFER. ANTT's recommendation, which was substantially contested by TLSA, does not bind the Granting Authority, nor does it end the discussion, as the evaluations of the Ministry of Infrastructure and the Presidency of the Republic are still pending. In addition, judicial review of the matter is also possible. The Company continues its activities to implement sections of the railway in the States of Piauí and Ceará and to preserve the sections already built, with a reasonable expectation that the continuity of its operations will be maintained.

On September 16, 2020, the request for reconsideration and suspension of Judgment No. 67/2017 was filed with TCU, which determined the suspension of transfers of public funds to the project until the assessment of engineering projects and the determination of the regulatory budget by National Land Transport Agency - ANTT. In this reconsideration request, management requests that, in view of the exhaustion of Transnordestina's measures to approve the budget for the project's works and the indispensability of the resources provided for in the agreements that structured the project for its completion, the understanding contained in Judgment 67 / 2017, with the consequent immediate release of public resources under the responsibility of public sources. In the alternative, he requested that, if the release of public contributions is not granted, we require the immediate release of FINOR funds, since, regardless of their nature, they have the character of reimbursement of the amounts evidently applied by Transnordestina in the works and cannot be subject to the suspension stipulated in Judgment No. 67/2017 - TCU.

On July 12, 2021, the Agency's Board, through the vote numbered 44/2021, with the purpose on the Evaluation of the regulatory aspects of the budget and variants of the Transnordestina Railway implementation project, voted for the approval of the regulatory budget in the amount of R\$ 8.9 billion.

The Concessionaire, considering the publication of ANTT's Deliberation No. 238, of July 13, 2021, which validated the referred Budget and, in line with the procedural means, presented a Reconsideration Request in which it detailed technical elements to validate its calculations. The request is pending analysis.

Through ANTT's Deliberation No. 447, published on December 21, 2021, the regulatory agency partially accepted the arguments brought by the concessionaire in order to update the value of the regulatory budget to the amount of R\$10,774,122.

· FTL - Ferrovia Transnordestina Logística SA (Operational network)

In relation to Malha I, operated by FTL - Ferrovia Transnordestina Logística SA ("FTL"), there is an administrative procedure before the National Transport Agency ("ANTT") that assesses the regular compliance with the Concession Contract obligations by the FTL Concessionaire. Due to a unilateral assessment, ANTT reported that FTL would have failed to comply with the TAC signed in 2013 due to the failure to meet the 2013 production target. In this context, the agency proposed to the Union the declaration of the expiry of the FTL Concession Contract and the initiation of an administrative proceeding within the scope of the Superintendence of Infrastructure and Railway Cargo Transport Services - SUFER. ANTT's recommendation, which was justifiably contested by FTL, is not binding on the Granting Authority, nor does it put an end to the discussion, since the evaluations by the Ministry of Infrastructure and the Presidency of the Republic are still pending. Furthermore, a judicial review of the matter is also possible. The Company continues its operational activities, with the reasonable expectation that the continuity of its operations will be maintained.

33. INSURANCE

In order to adequately mitigate risks and in view of the nature of its operations, the Company contract several different types of insurance policy. The policies are taken out in line with the Risk Management policy and are similar to the insurance taken out by other companies in the same industry in which CSN and its subsidiaries operate. The coverage of these policies includes National Transport, International Transport, Life and Personal Accident Insurance, Health, Vehicle Fleet, D&O (Administrators Liability Insurance), General Liability, Engineering Risks, Export Credit, Insurance Warranty and Civil Liability Port Operator.

The Company's insurance is contracted together with the insurance of its subsidiaries, but there is no joint or subsidiary responsibility between the Company and companies of its economic group with CSN Mineração.

In 2021, after negotiations with insurers and reinsurers in Brazil and abroad, an Operational Risk Insurance Policy for Property Damage and Business Interruption was issued, effective from June 30, 2021, to June 30, 2022. Under the policy, the Maximum Indemnity Limit is US\$475 million for the locations with Company activities combined for Property Damage and loss of profits, and the deductible is US \$ 385 million for material damages and 45 days for loss of profits. The policy's maximum indemnity limit is shared with other insured establishments.

The risk assumptions adopted, given their nature, are not part of the scope of an audit of the financial statements, and consequently, they have not been examined or reviewed by our independent auditors.

34. ADDITIONAL INFORMATION TO CASH FLOWS

The following table presents additional information on transactions related to the statement of cash flows:

	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>Consolidated</u> <u>12/31/2019</u>
Income tax and social contribution paid	3,062,047	542,877	1,167,419
Addition to PP&E with interest capitalization (notes 12 and 29)	87,414	92,506	117,189
Initial adoption IFRS16 – Right of use			640,989
Remeasurement and addition – Right of use (note 12 i)	171,215	109,993	(151,558)
Addition to PP&E without adding cash	69,788	30,345	278,213
Capitalization in subsidiaries without cash		104,809	
Addition to investment property without cash effect		61,597	
Net additional cash	<u>3,390,464</u>	<u>942,127</u>	<u>2,052,252</u>

35. SUBSEQUENT EVENTS

- **Issuance and Repurchase of Bonds**

In February 2022 the Company issued Bonds through its subsidiary CSN Resources S.A., in the amount of US\$500 million, with a single maturity in 10 years and annual rate of 5.875%. In addition, the company also made a tender offer to repurchase its Bonds (tender Offer) with maturity in 2026 and annual rate of 7.625% in the amount of US\$300 million.

- **Increase in capital stock**

The Board of Directors, in a meeting held on March 9, 2022, approved the capitalization of part of the statutory reserve in the amount of R\$4,200 million, without changing the number of shares, increasing the Company's capital stock to R\$10,240 million.

- **Debentures Issuance**

On January 20, 2022, CSN Cimentos, a subsidiary of the Company, signed an indenture to issue 1,200,000 (one million, two hundred thousand) of unsecured non-convertible debentures. The debentures were issued on February 15, 2022, with a 10-year maturity.

These debentures were privately subscribed by Virgo Companhia de Securitização, to be used as collateral for an issue of CRI - Real Estate Receivables Certificates, with settlement amount of R\$ 1.2 billion.

- **Borrowings**

On February 8, 2022, CSN Cimentos S.A. signed a financing contract with BNP Paribas to raise US\$115 million to finance the Company's future obligations. This financing is scheduled to mature on June 10, 2027.

- **Dividend approval**

On April 29, 2022, the Company approved, at the Annual Shareholders' Meeting, the distribution of the remainder mandatory minimum dividends, in the amount of R\$904 million to be paid by December 31, 2022.

On April 29, 2022, the subsidiary CSN Mineração approved, at the Annual Shareholders' Meeting, the distribution of additional dividends in the amount of R\$2,520 million to be paid by December 31, 2022.

- **Acquisition of Metalgráfica**

On November 23, 2021, the Company, as an investor, the controlling shareholders of Metalgráfica Iguaçú S.A. ("Metalgráfica"), and Metalgráfica, as an anuent intervener, concluded the Investment and Other Covenants Agreement, through which the parties agreed to promote the combination of the operations of both companies by incorporating all shares issued by Metalgráfica by CSN, according to the exchange relationship to be defined in accordance with the Law of the S.A. and the regulation of the CVM.

This operation will increase the competitiveness of CSN's metal packaging business and strengthen our national chain, especially in relation to replacement packaging. On April 25, 2022, CADE approved the acquisition of Metalgráfica Iguaçú by CSN.

- **Usiminas' Shares**

The Usiminas' shares classified as financial investments (see note 4) are exposed to changes in the share price due to the securities adopted at fair value through profit or loss according to quotations on the Stock Exchange. On May 13, 2022, common and preferred shares depreciated in the global amount of R\$746 million since the balance sheet closing date.

- **Acquisition of Santa Ana Energética S.A. and Topázio Energética S.A.**

On April 8, 2022, CSN Cimentos together with CSN Energia S.A. ("CSN Energia"), also controlled by CSN, as buyers, concluded with Brookfield Americas Infrastructure (Brazil Power) Fundo de Investimento em Participações Multiestratégia, an equity investment fund managed by Brookfield Brasil Asset Management Investimentos Ltda., as a seller, the Contract for the Purchase and Sale of Shares for the acquisition of 100% of the shares issued by Santa Ana Energética S.A., concession holder for exploration of the Hydroelectric Power Plant of Santa Ana, as well as Topázio Energética S.A., and, indirectly, of Brasil Central Energia Ltda., subsidiary of Topázio, concession holder for exploration of the Hydroelectric Power Plant of Sacre II, having the Company as guarantor of the obligations undertaken by CSN Cimentos and by CSN Energia.

The closure of the operation is subject, among other suspensive conditions, to the approval by the competition and regulatory authorities.