

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 20-F

(Mark One)

Registration statement pursuant to Section 12(b) or 12(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, 2022

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: 001-31518

TENARIS S.A.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Grand Duchy of Luxembourg

(Jurisdiction of incorporation or organization)

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L-2449 Luxembourg

(Address of principal executive offices)

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(Name, Telephone, E-Mail and/or Facsimile number and Address of Company Contact Person)

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

Title of Each Class	Name of Each Exchange On Which Registered
American Depositary Shares	New York Stock Exchange
Ordinary Shares, par value \$1.00 per share	New York Stock Exchange*

* Ordinary shares of Tenaris S.A. are not directly listed for trading but only in connection with the registration of American Depositary Shares which are evidenced by American Depositary Receipts.

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

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

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

1,180,536,830 ordinary shares, par value \$1.00 per share

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

Note – checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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, 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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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
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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

Please send copies of notices and communications from the Securities and Exchange Commission to:

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Annual Report on Form 20-F

2022

TENARIS S.A.
26, Boulevard Royal - 4th Floor
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FORM 20-F CROSS REFERENCE GUIDE

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Item 3	Key Information	Key Information
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6.D	Employees	Directors, Senior Management and Employees - Share Ownership
6.E	Share Ownership	Disclosure of a Registrant's Action to Recover Erroneously
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8.A	Consolidated Statements and Other Financial Information	Financial Information - Significant Changes
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Item 9	The Offer and Listing	The Offer and Listing - Offer and Listing Details
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9.C	Markets	None - Not applicable
9.D	Selling Shareholders	None - Not applicable
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9.F	Expenses of the Issue	Additional Information
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10.B	Memorandum and Articles of Association	Corporate Governance Statement - Corporate Governance
10.C	Material Contracts	Information on the Company - Business Overview
10.D	Exchange Controls	Additional Information - Exchange Controls
10.E	Taxation	Additional Information - Taxation
10.F	Dividends and Paying Agents	None - Not applicable
10.G	Statement by Experts	None - Not applicable
10.H	Documents on Display	Additional Information - Documents on Display
10.I	Subsidiary Information	None - Not applicable
10.J	Annual Report to Security Holders	None - Not applicable
Item 11	Quantitative and Qualitative Disclosure about Market Risk	Quantitative and Qualitative Disclosure about Market Risk
Item 12	Description of Securities Other Than Equity Securities	Description of Securities Other Than Equity Securities
12.A	Debt Securities	None - Not applicable
12.B	Warrants and Rights	None - Not applicable
12.C	Other Securities	None - Not applicable
12.D	American Depositary Shares	Description of Securities Other Than Equity Securities - American Depositary Shares

Part II

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Part III

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LETTER FROM THE CHAIRMAN

2022 was a record year for Tenaris. We were able to take advantage of favorable market conditions, particularly in North America, and the efficient deployment of our global industrial system to generate strong increases in sales and margins through the year.

Our sales grew 80% to USD 11.8 billion, our EBITDA rose to USD 3.6 billion, and our net income rose to USD 2.5 billion, or 22% of net sales. With a solid balance sheet and good prospects for an increase in cash flow in the year ahead, we are proposing to raise our dividend for the 2022 year by 24% to USD 0.51 per share.

We produced over 3.5 million tons of steel pipes worldwide, sustaining an ongoing ramp up of our facilities in the USA and high levels of production throughout our industrial system. Despite the use of longer and more complex production and logistics routes, we were able to maintain high standards for safety, product quality and consumption of materials.

During the year, we hired 6,500 new employees and, in our induction training routines, we paid close attention to the importance of having a safety mindset with awareness and behaviors suitable for the industrial environment of our shop floor. We empower all our employees to be proactive in always taking preventive safety actions. Our lost time injury frequency rate for the year declined by 10% to 0.9 per million man hours worked. We are grateful to our people working in the plant for their contribution to this result.

We increased the deployment of our Rig Direct® services. We are now serving over 500 rigs directly worldwide. Our unique service platform allows us to integrate our operations more closely with our customers, minimizing material production and flows, and provide digital and technical services that can further differentiate us from our competitors.

As we increased production, sales and service, our logistics operations have reached a substantial magnitude. To give an idea of the efforts involved, between inter-mill transportation and delivery to customers, we moved around 10 million tons of material all around the world. We are strengthening the reliability of our supply chain through the digitalization of our material flows.

2022 marked a turning point in our deployment in the United States. The country accounted for more than 40% of our total sales, most of which are now produced locally. We brought the Bay City mill to full production capacity and ramped up production in the rest of our US industrial system including the restart of production of welded pipes and of heat treatment and finishing at our Baytown and Koppel sites. We hired more than 1,500 new employees during the year and now employ 3,600 persons in the country.

The energy transition is progressing, but its pace will be gradual. The phasing out of fossil fuels needs to be balanced with considerations of energy security, access and affordability in a world which has distinct regional priorities. Our role is to support our customers with high quality, efficient tubular solutions so that current sources of energy can be delivered securely and affordably with the lowest impact possible on the environment. At the same time, we are developing products and solutions for cleaner sources of energy and carbon abatement systems, such as hydrogen, geothermal energy and carbon dioxide transportation and storage systems.

An essential part of our role is to reduce the carbon emissions from our operations as quickly as technology and market conditions allow. We are making good progress towards our initial target of reducing the carbon emissions intensity of our operations by 30% by 2030 compared to a 2018 baseline. Around 30% of our capex is now being directed to projects that will contribute to this target and other environmental objectives. In addition to our wind farm in Argentina, we will be making investments which will contribute to improving energy efficiency in Italy and Argentina and improving air quality at our Koppel steel shop in the United States.

As we look ahead, we view that the current balance in the oil market and high demand for LNG will support oil and gas prices and investment in the sector. We expect that the number of oil and gas wells drilled around the world in 2023 will increase and this will drive global OCTG demand to around 16 million tons to reach its highest level since 2014.

With the increase in activity, we expect further sales and cash flow growth with increases in sales to offshore developments, in the Middle East and in pipeline infrastructure in South America.

Our achievements over the past year that will support this growth include: our multi-year agreement with ExxonMobil to supply their offshore operations in Guyana; our agreements with Petrobras to supply their pre-salt operations; the renewal of our long-term worldwide agreement with ENI; the renewal of our long-term agreement with QatarGas and the consolidation of our long-term agreement with ADNOC. We also extended our long-term agreements with YPF and Pemex and were awarded supply agreements for major gas pipeline projects for the Vaca Muerta field in Argentina and the North Field expansion in Qatar.

The sustainability of our operations worldwide depends on the support and development of our local communities. Safety and care for the environment are paramount, as is support for employee and community development. Given its essential role in progress and development, we have put education at the core of our community activities.

Our efforts to strengthen technical education are increasingly recognized. The Roberto Rocca Technical School in Campana became the first school in Argentina to be qualified as a Technical Training Center providing certifications to members of the local community for Industry 4.0 - related technical training, in partnership with German automation and industrial companies, FESTO and Siemens.

In Cartagena, Colombia, through our Roberto Rocca Technical Gene program, we helped to redesign a technical school, introducing new technical study courses in partnership with the SENA national learning system and improving job opportunities with local industrial companies for young people in the community.

Over the past year, Tenaris has made good progress on many fronts and produced record financial results. We have been able to achieve this only thanks to the confidence our customers have placed in us and the constant efforts and outstanding performance of our diverse and united team of employees around the world in a volatile and fast-moving environment. We thank them together with our suppliers and shareholders for their continued support for our company.

Sincerely,

/s/ Paolo Rocca

Paolo Rocca

March 31, 2023

CERTAIN DEFINED TERMS

Unless otherwise specified or if the context so requires:

- References in this annual report to “the Company” are exclusively to Tenaris S.A., a Luxembourg *société anonyme*.
- References in this annual report to “Tenaris”, “we”, “us” or “our” are to Tenaris S.A. and its consolidated subsidiaries. See “II. Accounting Policies A. Basis of presentation” and “II. Accounting Policies B. Group accounting” to our audited consolidated financial statements included in this annual report.
- References in this annual report to “San Faustin” are to San Faustin S.A., a Luxembourg *société anonyme* and the Company’s controlling shareholder.
- “shares” refers to ordinary shares, par value \$1.00, of the Company.
- “ADSS” refers to the American Depositary Shares, which are evidenced by American Depositary Receipts, and represent two shares each.
- “OCTG” refers to oil country tubular goods. See “Information on the Company – Business Overview – Our Products”.
- “tons” refers to metric tons; one metric ton is equal to 1,000 kilograms, 2,204.62 pounds, or 1.102 U.S. (short) tons.
- “billion” refers to one thousand million, or 1,000,000,000.
- “U.S. dollars”, “US\$”, “USD” or “\$” each refers to the United States dollar.
- “EUR” refers to the Euro.
- “ARS” refers to the Argentine peso.
- “BRL” refers to the Brazilian real.

PRESENTATION OF CERTAIN FINANCIAL AND OTHER INFORMATION

Accounting Principles

We prepare our consolidated financial statements in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”), and in accordance with IFRS, as adopted by the European Union. IFRS differs in certain significant aspects from generally accepted accounting principles in the United States, commonly referred to as U.S. GAAP. Additionally, this annual report includes certain non-IFRS alternative performance measures such as EBITDA, Net cash/debt position and Free Cash Flow. See Exhibit 15.2 for more details on these alternative performance measures.

We publish consolidated financial statements presented in increments of a thousand U.S. dollars. This annual report includes our audited consolidated statements of financial position as of 31 December 2022 and 2021, and the related consolidated income statements, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for each of the three years in the period ended 31 December 2022, including the related notes (collectively referred to as the “consolidated financial statements”).

Rounding

Certain monetary amounts, percentages and other figures included in this annual report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be the arithmetic aggregation of the figures that precede them, and figures expressed as percentages in the text may not total 100% or, as applicable, when aggregated may not be the arithmetic aggregation of the percentages that precede them.

Our Internet Website is Not Part of this Annual Report

We maintain an Internet website at www.tenaris.com. Information contained in or otherwise accessible through our Internet website is not a part of this annual report. All references in this annual report to this Internet site are inactive textual references to these URLs, or “uniform resource locators” and are for informational reference only. We assume no responsibility for the information contained on our Internet website.

Industry Data

Unless otherwise indicated, industry data and statistics (including historical information, estimates or forecasts) in this annual report are contained in or derived from internal or industry sources believed by Tenaris to be reliable. Industry data and statistics are inherently predictive and are not necessarily reflective of actual industry conditions. Such statistics are based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents, including judgments about what types of products and transactions should be included in the relevant market. In addition, the value of comparisons of statistics for different markets is limited by many factors, including that (i) the markets are defined differently, (ii) the underlying information was gathered by different methods and (iii) different assumptions were applied in compiling the data. Such data and statistics have not been independently verified, and the Company makes no representation as to the accuracy or completeness of such data or any assumptions relied upon therein.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This annual report and any other oral or written statements made by us to the public may contain “forward-looking statements” within the meaning of and subject to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. This annual report contains forward-looking statements, including with respect to certain of our plans and current goals and expectations relating to Tenaris’s future financial condition and performance.

Sections of this annual report that by their nature contain forward-looking statements include, but are not limited to, “Key Information”, “Information on the Company”, “Operating and Financial Review and Prospects”, “Financial Information” and “Quantitative and Qualitative Disclosure About Market Risk”.

We use words and terms such as “aim”, “will likely result”, “will continue”, “contemplate”, “seek to”, “future”, “objective”, “goal”, “should”, “will pursue”, “anticipate”, “estimate”, “expect”, “project”, “intend”, “plan”, “believe” and words and terms of similar substance to identify forward-looking statements, but they are not the only way we identify such statements. All forward-looking statements are management’s present expectations of future events and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These factors include the risks related to our business and industry discussed under “Key Information – Risk Factors”, including among them, the following:

- our ability to implement our business strategy and to adapt it adequately to the energy transition or to grow through acquisitions, joint ventures and other investments;
- our ability to price our products and services in accordance with our strategy;
- trends in the levels of investment in oil and gas exploration and drilling worldwide;
- the competitive environment in our business and our industry;
- the impact of climate change legislations, including increasing regulatory requirements and extensive technology and market changes aimed at transitioning to a lower-carbon economy and reducing greenhouse gas (“GHG”) emissions;
- the physical risks resulting from climate change, including natural disasters, increased severity of extreme weather events, chronic climate changes and long-term shifts in weather patterns;
- our ability to absorb cost increases and to secure supplies of essential raw materials and energy;
- our ability to adjust fixed and semi-fixed costs to fluctuations in product demand;
- the impact of the world’s economy on the energy sector in general, or our business and operations;

- general macroeconomic changes, including high inflation rates and central banks' measures to address inflation, as well as, international conflicts, public health epidemics (such as the COVID-19 pandemic) and other political, social, or economic conditions and developments in the countries in which we operate or distribute pipes, including developments in connection with the Russia-Ukraine armed conflict; and
- changes to applicable laws and regulations, including the imposition of tariffs or quotas or other trade barriers.

By their nature, certain disclosures relating to these and other risks are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains or losses or other occurrences or developments that may affect our financial condition and results of operations could differ materially from those that have been estimated. You should not place undue reliance on forward-looking statements, which speak only as of the date of this annual report. Except as required by law, we are not under any obligation, and expressly disclaim any obligation to, update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

CONSOLIDATED MANAGEMENT REPORT

Key Information

Risk Factors

You should carefully consider the risks and uncertainties described below, together with all other information contained in this annual report, before making any investment decision. Any of these risks and uncertainties could have a material adverse effect on our business, revenues, financial condition and results of operations, which could in turn affect the price of shares and ADSs.

Risks Relating to Our Business and Industry

Sales and profitability may fall as a result of downturns in the international price of oil and gas and other factors and circumstances affecting the oil and gas industry

We are a global steel pipe manufacturer with a strong focus on manufacturing products and providing related services for the oil and gas industry. The oil and gas industry is a major consumer of steel pipe products worldwide, particularly for products manufactured under high quality standards and demanding specifications. Demand for steel pipe products from the oil and gas industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells. The level of exploration, development and production activities of, and the corresponding capital spending by, oil and gas companies, including national oil companies, depends primarily on current and expected future prices of oil and natural gas and is sensitive to the industry's view of future economic growth and the resulting impact on demand for oil and natural gas. Several factors, such as the supply and demand for oil and gas, the development and availability of new drilling technology, political and global economic conditions, and government regulations, affect these prices. For example, drilling technology has allowed producers in the United States and Canada to increase production from their reserves of tight oil and shale gas in response to changes in market conditions more rapidly than in the past. In addition, government initiatives to reduce GHG emissions, such as the introduction of a carbon tax or carbon-pricing systems (such as the EU Carbon Border Adjustment Mechanism), the adoption of "cap-and-trade" systems (such as the EU Emissions Trading System ("ETS")) or other measures to promote the use of renewable energy sources or, electric vehicles, could also affect oil and gas prices. When the price of oil and gas falls, oil and gas companies generally reduce spending on production and exploration activities and, accordingly, make fewer purchases of steel pipe products. Major oil-and gas-producing nations and companies have frequently collaborated to balance the supply (and thus the price) of oil in the international markets. A major vehicle for this collaboration has been the Organization of Petroleum Exporting Countries ("OPEC") and many of our customers are state-owned companies in member countries of OPEC, which plays a significant role in trying to counter falling prices, as was the case in 2020, when the industry was hit by the effects of the COVID-19 pandemic. For more information on risks relating to climate change regulations, see "Risks Relating to Our Business and Industry - Climate change legislation and increasing regulatory requirements aimed at transitioning to a lower-carbon economy may reduce demand for our products and services and result in unexpected capital expenditures and costs, and negatively affect our reputation".

Climate change legislation and increasing regulatory requirements aimed at transitioning to a lower-carbon economy may reduce demand for our products and services and result in unexpected capital expenditures and costs, and negatively affect our reputation

There is an increased attention on GHG emissions and climate change from different sectors of society. The Paris Agreement, adopted at the 2015 United Nations Climate Conference, sets out the global framework to limit the rising temperature of the planet and to strengthen the countries' ability to deal with the effects of climate change. The EU ETS signaled a major EU energy policy to combat global warming based on a "cap & trade" program, and the European Green Deal, launched in 2019, focuses on adopting the required policies and measures aimed at reaching zero GHG emissions in Europe by 2050. The EU taxonomy classification system, which establishes a list of environmentally sustainable economic activities, is designed to help the EU scale up sustainable investment and implement the European Green Deal. Similarly, the U.S. Inflation Reduction Act of 2022 calls for a reduction of carbon emissions by roughly 40% by 2030. Other countries are introducing or considering similar measures or regulations which would lower emissions. If there is no meaningful progress in lowering emissions in the years ahead, there is an increased likelihood of abrupt policy interventions as governments attempt to meet their environmental goals by adopting policy, legal, technology and market changes in the transition to a low-carbon global economy. We provide products and services to the oil and gas industry, which accounts, directly and indirectly, for a significant portion of GHG emissions. Existing and future legislation and regulations related to GHG emissions (such as increased pricing of GHG emissions and enhanced emissions-reporting obligations) and climate change, as well as government initiatives to promote the use of alternative energy sources and substitute existing products and services with lower emissions options (with many jurisdictions implementing tax advantages and other subsidies to promote the development of renewable energy sources, or even requiring minimum thresholds for power generation from renewable sources) may significantly curtail demand for and production of fossil fuels, such as oil and natural gas. These initiatives, together with the growing social awareness regarding climate change and other environmental matters, have resulted in increased investor and consumer demand for renewable energy and additional compliance requirements for fossil energy projects, which are likely to become more stringent over time and to result in substantial increases in costs for the oil and natural gas industry, potentially leading to write-offs and early retirement of existing assets. Furthermore, ongoing technological developments in the renewable energy industry are making renewable energy increasingly competitive with fossil-fuels. If this trend continues, energy demand could shift increasingly towards more environmentally sustainable sources such as hydroelectrical, solar, wind and other renewable energies, which would, in turn, reduce demand for oil and natural gas, thus negatively affecting demand for our products and services and, ultimately, our future results of operations. In addition, adoption of new climate change legislation in the countries in which Tenaris operates could result in incremental operating costs (such as incremental compliance costs and increased insurance premiums) and unexpected capital expenditures and, eventually, affect our competitiveness and reduce our market share. Also, shifts in customer preferences and failure to respond to shareholders' demand for climate-related measures and environmental standards could harm our reputation, adversely affect the ability or willingness of our customers or suppliers to do business with us, negatively impact workforce management and planning, erode stakeholder support and restrict or reduce access to financial resources. For more information on Tenaris's climate change initiatives, please see "Operating and Financial Review and Prospects – Overview – Climate Change".

The physical risks resulting from climate change, including extreme weather conditions and shifts in weather patterns, have in the past and may in the future adversely affect our operations and financial results

Our business has been, and in the future could be, affected by severe weather in areas where we operate, which could materially affect our operations and financial results. Extreme weather conditions and natural disasters such as hurricanes, flooding or coastal storm surges have in the past resulted in, and may in the future result in, the shutdown of our facilities, evacuation of our employees or activity disruptions at our client's well-sites or in our supply chain. For example, the severe freeze in the United States and Mexico in early 2021, caused gas and power shortages in Texas, resulting in additional costs and production disruptions and losses. Additionally, chronic climate changes, such as changes in precipitation patterns and rising of average temperatures and sea levels may result in increased operating or capital costs due to supply shortages or damage to facilities, increased insurance premiums or reduced availability of insurance, decreases in revenue derived from lower sales, lower production capacity or negative impacts on workforce and write-offs and/or early retirement of assets, all of which could adversely affect our financial condition, results of operations and cash flows. For more information on Tenaris's climate change initiatives, please see "Operating and Financial Review and Prospects – Overview – Climate Change".

Competition in the global market for steel pipe products may cause us to lose market share and hurt our sales and profitability

The global market for steel pipe products is highly competitive, with the primary competitive factors being price, quality, service and technology. In recent years, substantial investments have been made, especially in China but also in the United States and the Middle East, to increase production capacity of seamless steel pipe products, and as a result there is significant excess production capacity, particularly for “commodity” or standard product grades. Production capacity of more specialized product grades has also increased. At the same time, the high cost and long lead times required to develop the most complex projects, particularly deepwater projects, has led to a slowdown in new developments in a context of low and more volatile oil prices. Despite our efforts to develop products and services that differentiate us from our competitors, reduced demand for steel pipe products from these complex projects means that the competitive environment is expected to remain intense in the coming years and our effective competitive differentiation will be a key success factor. In addition, there is a risk of unfairly traded steel pipe imports in markets in which Tenaris produces and sells its products, and we can give no assurance with respect to the application of antidumping duties and tariffs or the effectiveness of any such measures.

Our sales may be affected as a result of antidumping and countervailing duty proceedings or by the imposition of other import restrictions or local content requirements

Because of the global nature of our operations, we export and import products from several countries and, in many jurisdictions, we supplement domestic production with imported products. We import OCTG from Argentina and Mexico to complement our significant and growing production in the United States. From time to time, local producers seek the imposition of import restrictions or the initiation of antidumping or countervailing duty proceedings. For example, in October 2021, the U.S. Department of Commerce (“DOC”) initiated antidumping duty investigations of OCTG imports from Argentina, Mexico, and Russia and countervailing duty investigations of OCTG imports from Russia and South Korea, which resulted in a determination by the International Trade Commission (“ITC”), issued in October 2022, that the imports under investigation caused injury to the U.S. OCTG industry, bringing the investigation phase to a conclusion. Although Tenaris and other parties have appealed the agencies’ determinations from the investigation to the Court of International Trade, Tenaris is required to pay antidumping duty deposits until such time the imports are reviewed by the DOC to determine whether final duties are necessary for the specific period under review. For more information on this matter, please refer to “Consolidated Statements and Other Financial Information – Legal Proceedings”. Additionally, in June 2021, Canada initiated an antidumping investigation on OCTG from Mexico; in 2022, the Canadian International Trade Tribunal found that Mexican imports were not injuring the Canadian OCTG industry and closed the inquiry without imposing any duties. Antidumping or countervailing duty proceedings, any resulting penalties or any other form of import restriction have in the past impeded, and may in the future restrict, our access to important export markets for our products, thereby adversely impacting our sales or limiting our opportunities for growth.

In addition, several jurisdictions have begun to impose or expand local content requirements. For example, in recent years Saudi Arabia has implemented various measures aimed at increasing local content particularly from suppliers to state-owned companies such as Saudi Arabian Oil Company (“Saudi Aramco”) and we can expect that measures favoring the development of local production will increase as Saudi Arabia seeks to create employment opportunities for its citizens and diversify its economy away from its dependence on oil and gas production. Other countries, such as Brazil, Ecuador, Indonesia, Nigeria and the United Arab Emirates, have also put in place significant local content requirements. If countries impose or expand local content requirements or put in place regulations limiting our ability to import certain products, our competitive position could be negatively affected. Therefore, if any of these risks materialize, we may not continue to compete effectively against existing or potential producers and preserve our current shares of geographic or product markets, and increased competition may have a material impact on the pricing of our products and services, which could in turn adversely affect our revenues, profitability and financial condition.

Our sales may also be affected as a result of other international trade regulations

The shipment of goods and services across international borders subjects us to extensive trade laws and regulations. Our import and export activities are governed by customs laws and regulations in each of the countries where we operate. Moreover, the European Union, the United States and other countries control the import and export of certain goods and services and impose related import and export recordkeeping and reporting obligations. Those governments have also imposed economic sanctions against certain countries, persons and other entities, such as sanctions that restrict or prohibit transactions involving Iran, Syria, Venezuela and Russia or their citizens or companies. For more information on the impact on our business of the sanctions on Russia as a result of the armed conflict in Ukraine, see “Risks Relating to Our Business and Industry - The Russia-Ukraine armed conflict may adversely affect our operations”. Similarly, we are subject to the U.S. anti-boycott laws. Trade laws and regulations are complex and frequently changing, and they may be enacted, amended, enforced or interpreted in a manner that could materially impact our operations. For example, in March 2018, under Section 232 of the Trade Expansion Act of 1962 (“Section 232”), the United States imposed a 25% tariff on steel articles imported from all countries, with the exemption of Canada and Mexico, as member states of the USMCA, and imports of steel tubes from Australia, Argentina, Brazil and South Korea (the latter three with specific quotas per product). The U.S. government has also granted five successive exemptions on imports from Italy, Mexico, Romania and Argentina, of steel billets to be used at our Bay City mill, for an aggregate amount of 1,750,000 tons. Exemptions are granted only for a one-year term and future requests might not be granted, thus adversely affecting our operations or revenues. On October 31, 2021, the United States and the EU reached an agreement whereby Section 232 tariffs were replaced with tariff-rate quotas for steel melted and poured in Europe starting on January 1, 2022, and steel products imported from the EU for a period of two calendar years (i.e., until 31 December 2023) without the need to reapply. This agreement allows Tenaris to import, through December 31, 2023, up to 299,376 tons of billets from Italy and Romania without paying the 25% annual tariff. Failure to comply with applicable trade regulations could also result in criminal and civil penalties and sanctions.

Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy, and price mismatches between raw materials and our products may hurt our profitability

The manufacture of seamless steel pipe products requires substantial amounts of steelmaking raw materials and energy; welded steel pipe products, in turn, are processed from steel coils and plates. The availability and pricing of a significant portion of the raw materials and energy we require are subject to supply and demand conditions, which can be volatile, and to tariffs and other government regulations, which can affect continuity of supply and prices. In addition, disruptions, restrictions or limited availability of energy resources in markets where we have significant operations could lead to higher costs of production and eventually to production cutbacks at our facilities in such markets. For example, in early 2021 we suffered gas and power shortages in Texas caused by a severe freeze affecting the United States and Mexico, which resulted in additional costs and production losses. At any given time, we may be unable to obtain an adequate supply of critical raw materials with price and other terms acceptable to us. The availability and prices of raw materials may also be negatively affected by new laws and regulations, including import controls, sanctions and other trade restrictions, allocation by suppliers, interruptions in production, accidents or natural disasters, armed conflicts, chronic climate change, changes in exchange rates, worldwide price fluctuations, and the availability and cost of transportation. For further information related to the impact on our business of the armed conflict in Ukraine see “Risks Relating to Our Business and Industry - The Russia-Ukraine armed conflict may adversely affect our operations”. Raw material prices could also be affected by the introduction of carbon prices or taxes, or as a result of changes in production processes, such as an increased use of metal scrap, adopted by steelmaking companies seeking to reduce carbon emissions. In addition, we may not be able to recover, partially or fully, increased costs of raw materials and energy through increased selling prices for our products, or it may take an extended period of time to do so, and limited availability could force us to curtail production, which could adversely affect our sales and profitability.

Our results of operations and financial condition could be adversely affected by low levels of capacity utilization or failure to retain qualified workforce

Like other manufacturers of steel-related products, we have fixed and semi-fixed costs (e.g., labor and other operating and maintenance costs) that cannot adjust rapidly to fluctuations in product demand for several reasons, including operational constraints and regulatory restrictions. If demand for our products falls significantly, or if we are unable to operate due to, for example, governmental measures or unavailability of workforce, these costs may adversely affect our profitability and financial condition. For example, in response to the abrupt and steep downturn of the oil and gas industry resulting from the oil crisis and the COVID-19 pandemic in 2020, we were required to implement cost-containment measures and liquidity preservation initiatives, including reduction of our operating activities in several jurisdictions, temporary closure of facilities in the United States and review of our capital expenditure plans. Temporary suspensions of operations or closure of facilities generally lead to layoffs of employees, as was our case during the oil crisis and the COVID-19 pandemic, which may in turn give rise to labor conflicts and impact operations. Cost containment measures may also affect profitability and result in charges for asset impairments. In addition, in times of economic growth and high demand for our products we may not be able to retain qualified workforce or hire additional employees soon enough. Moreover, certain consequences of climate change, such as shifts in customer preferences, stigmatization of our industry or failure to respond to shareholder demands for climate-related measures could negatively impact workforce management and planning, adversely affecting employee attraction and retention. For example, during the post-pandemic recovery period, when we brought production at our Bay City mill to full capacity, we faced some difficulties in hiring qualified workforce. For more information, see “History and Development of the Company – Sales and Marketing”.

Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition

We have significant operations in various countries, including Argentina, Brazil, Canada, China, Colombia, Indonesia, Italy, Mexico, Nigeria, Romania, Saudi Arabia and the United States, and we sell our products and services throughout the world. Therefore, like other companies with worldwide operations, our business and operations have been, and could in the future be, affected from time to time to varying degrees by political, economic, social and public health developments and changes in laws and regulations. These developments and changes may include, among others, nationalization, expropriation or forced divestiture of assets; restrictions on production, imports and exports; antidumping or countervailing duties; travel, transportation or trade bans; interruptions in the supply of essential energy inputs; currency exchange and/or transfer restrictions, inability or increasing difficulties to repatriate income or capital or to make contract payments; inflation; devaluation; war or other armed conflicts (including the Russia-Ukraine armed conflict and regional conflicts in the Middle East and Africa); civil unrest and local security concerns, including high incidences of crime and violence involving drug trafficking organizations that threaten the safe operation of our facilities and operations; direct and indirect price controls; tax increases and changes (including retroactive) in the interpretation, application or enforcement of tax laws and other claims or challenges; cancellation of contract or property rights; and delays or denials of governmental approvals. Both the likelihood of such occurrences and their overall impact upon us vary greatly from country to country and are not predictable. Realization of these risks could have an adverse impact on the results of operations and financial condition of our subsidiaries located in the affected country and, depending on their materiality, on the results of operations and financial condition of Tenaris as a whole. For example, in March 2022, we recorded an impairment in the amount of approximately \$14.9 million, fully impairing our investment in a joint venture in Russia that we had established with PAO Severstal (“Severstal”) as a result of the designation of Severstal’s controlling shareholder as a person subject to EU and UK sanctions. For more information on the impact on our business of the armed conflict in Ukraine, see “Risks Relating to our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations”.

More specifically, Argentina and Mexico are countries in which we have significant operations and relevant risks.

Our business and operations in Argentina may be materially and adversely affected by economic, political, social, fiscal and regulatory developments, including the following:

- Macroeconomic and political conditions in Argentina may adversely affect our business and operations. Increased state intervention in the stagnant economy, along with the introduction of changes to government policies, including measures aimed at ensuring the sustainability of sovereign debt (including debt with the International Monetary Fund and other international creditors); high and unpredictable inflation rates and a high fiscal deficit in a highly indebted economy, coupled with other government measures affecting investors' confidence, could cause a drop in demand for our products in the domestic market, adversely affecting our operations and financial results. Similarly, they could also negatively impact the business and operations of our customers (oil and gas companies operating in Argentina) and consequently our revenues and profitability.
- Our business and operations in Argentina may be adversely affected by high inflation rates or by the measures that may be adopted by the government to address inflation. In particular, increases in services and labor costs could affect cost-competitiveness and margins, negatively impacting our results of operations. An economic environment highly characterized by inflation could undermine Argentina's foreign competitiveness in international markets and negatively affect economic activity and employment levels. Argentine inflation rate volatility makes it impossible to estimate with reasonable certainty the extent to which our activity levels and results of operations could be affected in the future. In addition, an increased level of labor demands in response to spiraling inflation could trigger higher levels of labor conflicts, and eventually result in strikes or work stoppages. Any such disruption of operations could have an adverse effect on our operations and financial results.
- Other events that may have an adverse effect on our operations and financial results include increased taxes, currency devaluation, exchange controls, restrictions on capital flows and export and import taxes or restrictions. The Argentine Central Bank has tightened its control on transactions that would represent capital inflows or outflows, forcing Argentine companies to repatriate export proceeds and limiting their ability to transfer funds outside of Argentina. Argentine companies are required to repatriate export proceeds from sales of goods and services (including U.S. dollars obtained through advance payment and pre-financing facilities) and convert such proceeds into Argentine pesos at the official exchange rate. In turn, Argentine companies must obtain prior Central Bank authorization, which is rarely (if ever) granted, to access the foreign exchange market to pay for imports of services from related parties or to make dividend or royalty payments. The Argentine government limits the import of goods and services by controlling access to the foreign exchange market. In accordance with the current goods and services import control system, in place since November 1, 2022, the Argentine authorities may, or may not, clear certain import payments and determine the payment terms. If control systems are maintained or are further tightened, our operations could be adversely affected. As the context of volatility and uncertainty remains in place as of the date of this annual report, additional regulations or restrictions that could be imposed by the Argentine government could further restrict our ability to access the official foreign exchange market, and expose us to the risk of losses arising from fluctuations in the ARS/USD exchange rate, or cause disruptions to our operations due to lack of imported raw materials and other inputs, or affect our ability to finance and even carry out major investments in Argentina, or impair our ability to convert and transfer outside the country funds generated by Argentine subsidiaries to pay dividends or royalties or make other offshore payments. For additional information on current Argentine exchange controls and restrictions see "Additional Information – Exchange Controls – Argentina" and note 28 "Foreign exchange control measures in Argentina" of our audited consolidated financial statements included in this annual report.
- In recent years, our operations in Argentina experienced constraints in their electricity and natural gas supply requirements on many occasions. Shortages of energy and natural gas in Argentina have led in the past (and could lead in the future) to production cutbacks negatively affecting our revenues and profitability; we could also face increased costs when using alternative sources of energy.

In Mexico, our business could be materially and adversely affected by economic, political, social, fiscal and regulatory developments, including the following:

- The Mexican government exercises significant influence over the Mexican economy and, therefore, governmental actions concerning the economy and state-owned enterprises could have a significant impact on Mexico's private sector and on our Mexican-related operations.
- We have a significant credit exposure to *Petróleos Mexicanos S.A. de C.V.* ("Pemex"), a Mexican state-owned entity and our main customer in Mexico. Starting in 2019 and through 2020, we built a hefty balance of accounts receivable with Pemex and we opted to sell some of our Pemex receivables with a discount; our exposure to Pemex remained high during 2022 and early 2023. Pemex, nevertheless, continues to maintain a regular payment flow and enabling alternative payment methods, including factoring structures. If we are not able to reduce our exposure to Pemex and Pemex defaults on its payments, our revenues and profitability would be adversely affected.
- Our Mexican operations could also be affected by criminal violence, primarily due to the activities of drug cartels and related organized crime that Mexico has experienced and may continue to experience. The city of Veracruz, where our facility is located, has experienced several incidents of violence. Although the Mexican government has implemented various security measures and has strengthened its military and police forces, drug-related crime continues to exist in Mexico. Our business may be materially and adversely affected by these activities, their possible escalation and the violence associated with them.
- In the last few years, the Mexican government made various attempts to modify rules and regulations governing the energy market in Mexico with potential impact on energy supply and its cost. In March 2021, the Mexican Congress approved a significant reform to the energy market in Mexico. Among other changes, the new Energy Industry Law ("LIE") grants priority to Mexico's state-owned electric power generation and distribution company ("CFE") over private generation competitors in the supply of electric power to the Mexican market and mandates a revision of power generation and transaction agreements between CFE and independent electric power suppliers. In addition, the LIE eliminates mandatory power supply auctions for energy supplies requiring the use of CFE's distribution network, relaxes the requirements for the granting of clean energy certificates in favor of CFE, and imposes serious restrictions on the renewable energy generation system through self-supply, widely used by private companies. The constitutionality of the new LIE was challenged in court, but on April 7, 2022, the Mexican Supreme Court of Justice rejected the request in a very tight decision. After the Supreme Court's decision, several participants continued seeking injunctive reliefs against the LIE on a case-by-case basis. In addition, in September 2021, President Andrés Manuel López Obrador submitted to Congress a constitutional reform proposal of the electricity sector, which seeks to reverse the legal framework derived from the 2013 constitutional energy reform that opened the sector to private investment. On April 18, 2022, the Mexican Congress rejected the constitutional reform proposal of the electricity sector, as the ruling party failed to obtain the required two-third affirmative vote. More recently, on June 14, 2022, the Mexican Secretary of Energy ("SENER") instructed two decentralized bodies, the Centro Nacional de Control del Gas Natural ("CENAGAS"), which regulates the natural gas storage and transportation system, and the Energy Regulation Commission ("CRE"), to adopt certain measures that would have put pressure on CENAGAS' customers to buy imported natural gas from CFE, Pemex or other state-controlled providers, to the detriment of private suppliers. If adopted, those measures would have affected the purchase of energy for certain natural gas injection points in the U.S.-Mexico border. *Tubos de Acero de México S.A.* ("Tamsa") challenged this initiative in court and obtained injunctive relief against the application of those measures. In January 2023, the Mexican Supreme Court of Justice confirmed the general suspension of SENER's resolution until a final decision is made on the lawfulness of the government's measures. Uncertainty remains as to whether the Mexican government or any of its decentralized bodies will seek any new reform of the energy market rules and regulations or adopt any measure that may negatively affect the energy supply or increase its cost. Any such new amendment or measures could negatively affect the operations of Tamsa and/or *Techgen S.A. de C.V.* ("Techgen"), the power plant in which Tenaris holds a 22% equity interest and which supplies electricity for most of our Mexican operations and, consequently, on the results of operations and financial conditions of our businesses in Mexico.
- In the past, our operations in Mexico were disrupted due to union-led stoppages resulting from an internal dispute within the local union. Although our Mexican operations have not experienced any further disruptions caused by employee stoppages since 2020, we cannot assure that further disruptions will not occur in the future. Any future stoppage, strike, disruption of operations or new collective bargaining agreements could result in lost sales and could increase our costs, thereby affecting our results of operations.

The Russia-Ukraine armed conflict may adversely affect our operations

On February 24, 2022, Russia launched a military attack on Ukraine. In response, the United States, the European Union and the United Kingdom, among other countries, have imposed a wave of sanctions against certain Russian institutions, companies and citizens. The Russian Government has retaliated by banning airlines from its airspace and has ordered economic counter measures, including restrictions on residents transferring foreign currency abroad. Russia is a major supplier of oil and gas in Europe and worldwide, and Russia and Ukraine are both major global suppliers of internationally traded steelmaking raw materials and semi-finished steel products. As a result of the armed conflict and related sanctions, energy and commodity prices have spiked upwards and foreign trade transactions involving Russian and Ukrainian counterparties have been severely affected. Although it is hard to predict how energy and commodity prices will behave as the conflict unfolds, higher prices and possible shortages of energy and raw materials used in our steelmaking operations (including natural gas and electric energy, particularly in Europe, steel scrap, pig iron, DRI, hot briquetted iron (“HBI”), ferroalloys, steel bars, coils and plates) would result in higher production costs and potential plant stoppages, affecting our profitability and results of operations. As a result of the economic sanctions imposed on Russia, we or our contractors (including shipping companies) may not be able to continue purchasing products from, or making payments to, Ukrainian or Russian suppliers or counterparties; and we may not be able to promptly procure such raw materials from other suppliers, or we may be required to purchase raw materials at increased prices.

In addition, we have suspended any sales to Russian customers or purchases from Russian suppliers that would breach applicable sanctions, and we are exploring alternatives with respect to potential relocation or closure of our representative office in Moscow, which is currently not operative. Furthermore, in March 2022, we recorded an impairment in the amount of approximately \$14.9 million, fully impairing our investment in our joint venture in Russia with Severstal.

If we do not successfully implement our business strategy, our ability to grow, our competitive position and our sales and profitability may suffer

We plan to continue implementing our business strategy of consolidating our position as a leading global supplier of integrated product and service solutions to the energy and other industries and adapting to the energy transition through reducing the carbon emissions in our operations and developing and supplying products and services for low-carbon energy applications, as well as continuing to pursue strategic investment opportunities. Any of the components of our overall business strategy could cost more than anticipated (including as a result of increasing regulatory requirements aimed at transitioning to a lower-carbon economy), may not be successfully implemented or could be delayed or abandoned. For example, we may fail to create sufficient differentiation in our Rig Direct[®] services to compensate the added costs of providing such services, or fail to find suitable investment opportunities, including acquisition targets that enable us to continue to grow and maintain or improve our competitive position.

Even if we successfully implement our business strategy, it may not yield the expected results, or decisions by our joint venture partners may frustrate our initiatives. For example, in November 2022, we entered into an agreement with JFE Holdings Inc. (“JFE”), our partner in NKK Tubes K.K. (“NKK Tubes”), to terminate our joint venture and liquidate NKK Tubes. For further information on the termination of the NKK Tubes joint venture, please refer to note 35 “Other relevant information - *Agreement to terminate NKK Tubes joint venture*” of our audited consolidated financial statements included in this annual report. In July 2022, we entered into an effective agreement to acquire Benteler Steel & Tube Manufacturing Corporation, a U.S. producer of seamless steel pipes owned by Benteler International A.G. (“Benteler”). The agreement provided, however, that either party could unilaterally terminate the agreement if the conditions to closing had not been satisfied by January 3, 2023, and in February 2023, Benteler exercised its right to unilaterally terminate, effective immediately, the acquisition agreement and, accordingly, the transaction did not proceed. For further information, please refer to note 35 “Other relevant information - *Agreement for acquisition of Benteler Steel & Tube Manufacturing Corporation*” of our audited consolidated financial statements included in this annual report.

Future acquisitions, strategic partnerships and capital investments may not perform in accordance with expectations or may disrupt our operations and hurt our profits

One element of our business strategy is to identify and pursue growth-enhancing strategic opportunities. As part of that strategy, we regularly make significant capital investments and acquire interests in, or businesses of, various companies. Consistent with our growth strategy, we intend to continue considering strategic acquisitions, investments and partnerships from time to time to expand our operations and establish a local presence in our markets. We must necessarily base any assessment of potential acquisitions, joint ventures and capital investments on assumptions with respect to timing, profitability, market and customer behavior and other matters that may subsequently prove to be incorrect. For example, we negotiated the terms for our \$1.0 billion acquisition of IPSCO Tubulars Inc. (“IPSCO”) in early 2019 based on assumptions made at that time, but due to the length of the antitrust review process, we were able to complete the acquisition only in 2020 under materially worse market circumstances. Furthermore, in November 2021 we reached a preliminary agreement with JFE to amicably terminate our joint venture and cease NKK Tubes’ operations in June 2022; management determined that the parties’ decision to terminate the NKK Tubes joint venture constituted an impairment indicator and accordingly conducted an impairment test, recognizing a charge of approximately \$57 million, impacting NKK Tubes’ property, plant and equipment and intangible assets. For more information, refer to note 5 “Impairment charge”, and note 35 “Other relevant information - *Agreement to terminate NKK Tubes joint venture*”, both to our audited consolidated financial statements included in this annual report. Our past or future acquisitions, significant investments and alliances may not perform in accordance with our expectations and could adversely affect our operations and profitability. In addition, new demands on our existing organization and personnel resulting from the integration of new acquisitions could disrupt our operations and adversely affect our operations and profitability. Moreover, as part of future acquisitions, we may acquire assets that are unrelated to our business, and we may not be able to integrate these assets or sell them under favorable terms and conditions.

Disruptions to our manufacturing processes could adversely affect our operations, customer service levels and financial results

Our steel pipe manufacturing processes depend on the operation of critical steelmaking equipment, such as electric arc furnaces (“EAF”), continuous casters, rolling mills, heat treatment and various operations that support them, such as our power generation facilities. Despite the investments we make to maintain critical production equipment, such equipment may incur downtime as a result of unanticipated failures or other events, such as fires, explosions, floods, earthquakes, accidents and severe weather conditions.

Similarly, natural disasters or severe weather conditions, including those related to climate change could significantly damage our production facilities and general infrastructure or affect the normal course of business. For example, our Mexican production facility located in Veracruz is located in a region prone to earthquakes, and our Bay City facility in Texas, United States is located in an area prone to strong winds and hurricanes, and occasional floods. More generally, changing weather patterns and climatic conditions in recent years have added to the unpredictability and frequency of natural disasters. For more information on the risks associated with climate-change, see “Risks Relating to Our Business and Industry – The physical risks resulting from climate change, including extreme weather conditions and shifts in weather patterns, have in the past and may in the future adversely affect our operations and financial results”.

Our operations may also be adversely affected as a result of work stoppages or other labor conflicts. In the past, our operations in Mexico were disrupted due to union-led stoppages resulting from an internal dispute within the local union. Although our Mexican operations have not experienced any further disruptions caused by employee stoppages since 2020, we cannot assure that further disruptions will not occur in the future. In addition, in some of the countries in which we have significant production facilities (e.g., Argentina and Brazil), significant inflationary pressures and higher tax burdens could increase labor demands and could eventually generate higher levels of labor conflicts, which may result in operational disruptions.

In addition, epidemics and other public health crises may disrupt our operations. For example, in response to the COVID-19 outbreak in 2020, several countries, including countries where Tenaris has operations (such as Argentina, China, Colombia, Italy, Mexico, Saudi Arabia and the United States) took mitigation and containment measures, including bans on business activities and temporary closure of industrial facilities and, accordingly, some of our facilities or production lines were closed or shutdown during 2020.

Some of the previously described emergency situations could result in damage to property, delays in production or shipments and, in extreme cases, death or injury to persons. Any of the foregoing could create liability for Tenaris. To the extent that lost production or delays in shipments cannot be compensated for by unaffected facilities, such events could have an adverse effect on our profitability and financial condition. Additionally, we do not carry business interruption insurance, and the insurance we maintain for property damage and general liability may not be adequate or available to protect us under such events, its coverage may be limited, or the amount of our insurance may be less than the related loss. For more information on our insurance coverage see “Information on the Company – Business overview – Insurance”.

We may be required to record a significant charge to earnings if we must reassess our goodwill or other assets as a result of changes in assumptions underlying the carrying value of certain assets, particularly as a consequence of deteriorating market conditions

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Intangible assets with indefinite useful life, including goodwill, are subject to impairment tests following IAS 36. Impairment tests may result in impairment charges, as shown below:

- In 2020, we recognized goodwill for approximately \$357 million in connection with our acquisition of IPSCO in January 2020. As a result of the severe deterioration of business conditions and in light of the presence of impairment indicators for our U.S. operations, we subsequently recorded impairment charges as of March 31, 2020, for an aggregate amount of approximately \$622 million.
- In December 2021, we recorded a charge of \$57 million in connection with the expected termination of the NKK Tubes joint venture.
- In March 2022, in light of the armed conflict in Ukraine and the designation of Severstal's controlling shareholder as a person subject to EU and UK sanctions, we recorded an impairment in the amount of approximately \$14.9 million, fully impairing our investment in our joint venture in Russia with Severstal. For more information on Tenaris's operations involving Russia, see "Key Information – Risk Factors – Risks Relating to Our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations".
- In September, 2022, mainly due to the lower expectations for steel demand and market steel prices, together with a worsened global macroeconomic situation that derived in an increase in discount rates, we wrote down our investment in Usinas Siderúrgicas de Minas Gerais S.A. ("Usiminas") by \$19.1 million.
- In December 2022, in the presence of impairment indicators, the Company conducted impairment tests, reviewed the values of certain idle assets in its subsidiaries and recorded impairment charges of \$76.7 million.

As of December 31, 2022, goodwill amounted to \$1,085 million corresponding mainly (\$920 million) to the acquisition of Hydril Company ("Hydril") in 2007 and is allocated to Hydril, Siderca and Tamsa cash generating units ("CGU").

For more information on impairment charges, please refer to note 5 "Impairment charge", note 13 "Investments in non-consolidated companies" and note 35 "Other relevant information - Agreement to terminate NKK Tubes joint venture" to our audited consolidated financial statements included in this annual report.

Our results of operations and financial condition could be adversely affected by movements in exchange rates

As a global company we manufacture and sell products throughout the world and a portion of our business is carried out in currencies other than the U.S. dollar, which is the Company's functional and presentation currency. As a result, we are exposed to foreign exchange rate risk. Changes in currency values and foreign exchange regulations could adversely affect our financial condition and results of operations. For information on our foreign exchange rate risk, please see "Quantitative and Qualitative Disclosure About Market Risk – Foreign Exchange Rate Risk".

Changes in applicable tax regulations and resolutions of tax disputes could negatively affect our financial results

We are subject to tax laws in numerous foreign jurisdictions where we operate. The integrated nature of our worldwide operations can produce conflicting claims from revenue authorities in different countries as to the profits to be taxed in the individual countries, including disputes relating to transfer pricing. Most of the jurisdictions in which we operate have double tax treaties with foreign jurisdictions, which provide a framework for mitigating the impact of double taxation on our results. However, mechanisms developed to resolve such conflicting claims are largely untried and can be expected to be very lengthy.

In recent years, tax authorities around the world have increased their scrutiny of companies' tax filings and have become more rigid in exercising any discretion they may have. As part of this, in 2015, the Organization for Economic Co-operation and Development ("OECD") proposed a number of tax law changes under its Base Erosion and Profit Shifting ("BEPS") Action Plans to address issues of transparency, coherence and substance. Most of the countries in which we operate have already implemented those changes within their own domestic tax legislations.

In 2019, the OECD launched a new initiative on behalf of the G20 under the format of a two pillars solution: Pillar One, aimed at minimizing profit shifting by working towards a global tax framework that ensures that corporate income taxes are paid where consumption takes place, and Pillar Two, aimed at introducing a global standard on minimum taxation, both combined with new tax dispute resolution processes. This project achieved OECD political consensus in October 2021. Pillar Two is scheduled to apply starting in 2024, while detailed principles on Pillar One are still under discussion.

At the EU level, the European Commission adopted in 2016 its Anti-Tax Avoidance Directive (“ATAD”), later updated, modified and expanded by ATAD 2, which seeks to prevent tax avoidance by companies and to ensure that companies pay appropriate taxes in the markets where profits are effectively made and business is effectively performed. In addition, the European Commission drafted a directive aiming to avoid the use of shell entities (ATAD 3), which, if approved and adopted by all EU members, would become effective in 2024. Also, the European Commission adopted in December 2022 another directive to impose a global minimum taxation for multinational companies in the Union, following Pillar Two OECD’s initiative. The new directive would become effective as from 2024.

Changes to tax laws and regulations in the countries where we operate require us to continually assess our organizational structure and could lead to increased risk of international tax disputes.

Our interpretation and application of the tax laws could differ from that of the relevant governmental taxing authority, which could result in the payment of additional taxes, penalties or interest, negatively affecting our profitability and financial condition. Significant uncertainties remain in relation to the potential adoption of the new regulations that might result from evolving initiatives like those launched by the OECD and the EU in relation to international taxation that could impact negatively our financial condition, results of operations and cash flows.

If we do not comply with laws and regulations designed to combat corruption in countries in which we sell our products, we could become subject to governmental investigations, fines, penalties or other sanctions and to private lawsuits and our sales and profitability could suffer

We operate and conduct business globally, including in certain countries known to experience high levels of corruption. Although we are committed to conducting business in a legal and ethical manner in compliance with local and international statutory requirements and standards applicable to our business, there is a risk that our employees, representatives, associates, affiliates, or other persons may take actions that violate applicable laws and regulations that generally prohibit offering or making of improper payments to any individual, including to government officials, for the purpose of obtaining a benefit or undue advantage or keeping business, as stated by the U.S. Foreign Corrupt Practices Act (“FCPA”). Investigations by government authorities may occupy considerable management time and attention, weaken company compliance culture and result in significant expenditures, fines, penalties or other sanctions, as well as private lawsuits. For information on matters related to the Company Business Conduct Compliance Program, please refer to our website on the matter <https://www.tenaris.com/en/sustainability/governance-and-ethics/>.

For example, upon learning that Brazilian, Italian and Swiss authorities were investigating whether certain payments were made prior to 2014 from accounts of entities presumably associated with affiliates of the Company to accounts allegedly linked to individuals related to *Petróleo Brasileiro S.A.* (“Petrobras”) and whether any such payments were intended to benefit *Confab Industrial S.A.* (“Confab”), the Audit Committee of the Company’s board of directors engaged external counsel in connection with the Company’s review of these matters. In addition, the Company voluntarily notified the U.S. Securities and Exchange Commission (“SEC”) and the U.S. Department of Justice (“DOJ”) in October 2016. The Company conducted, with the assistance of external counsel, an internal investigation and found no evidence corroborating any involvement by the Company or its directors, officers or employees in respect of improper payments. An internal investigation commissioned by Petrobras also found no evidence that Confab obtained any unfair commercial benefit or advantage from Petrobras in return for payments, including improperly obtained contracts. On June 2, 2022, the Company resolved the investigation by the SEC and the DOJ informed that it had closed its parallel inquiry without taking action. Under the settlement with the SEC, the Company neither admits nor denies the SEC’s findings and on June 24, 2022, paid \$53.1 million in disgorgement and prejudgment interest and \$25 million for a civil penalty to conclude the matter.

For information on matters related to the Petrobras-related proceedings and claims, please see “Consolidated Statements and Other Financial Information – Legal Proceedings”.

The cost of complying with environmental regulations and potential environmental and product liabilities may increase our operating costs and negatively impact our business, financial condition, results of operations and prospects

We are subject to a wide range of local, state, provincial and national laws, local and international regulations, permit requirements and decrees relating to the protection of human health and the environment, including laws and regulations relating to hazardous materials and radioactive materials and environmental protection governing air emissions, water discharges and waste management. Laws and regulations protecting the environment have become increasingly complex and more stringent and expensive to implement in recent years. Additionally, international environmental requirements vary. While standards in the European Union, Canada, and Japan are generally comparable to (or more stringent than) U.S. standards, other nations, particularly developing nations, including China, have substantially fewer or less rigorous requirements that may give competitors in such nations a competitive advantage. It is possible that any international agreement to regulate emissions may provide exemptions and lesser standards for developing nations. In such case, we may be at a competitive disadvantage relative to competitors having more or all of their production in such developing nations.

Environmental laws and regulations may, in some cases, impose strict liability rendering a person liable for damages to natural resources or threats to public health and safety without regard to negligence or fault. Some environmental laws provide for joint and several strict liability for remediation of spills and releases of hazardous substances. These laws and regulations may expose us to liability for the conduct of or conditions caused by others or for acts that were in compliance with all applicable laws at the time they were performed.

Compliance with applicable requirements and the adoption of new requirements could have a material adverse effect on our consolidated financial condition, results of operations or cash flows. The costs and ultimate impact of complying with environmental laws and regulations are not always clearly known or determinable since regulations under some of these laws have not yet been promulgated or are undergoing revision. The expenditures necessary to remain in compliance with these laws and regulations, including site or other remediation costs, or costs incurred as a result of potential violations of environmental laws could have a material adverse effect on our financial condition and profitability. While we incur and will continue to incur expenditures to comply with applicable laws and regulations, there always remains a risk that environmental incidents or accidents may occur that may negatively affect our reputation or our operations.

Our oil and gas casing, tubing and line pipe products are sold primarily for use in oil and gas drilling, gathering, transportation, processing and power generation facilities, which are subject to inherent risks, including well failures, line pipe leaks, blowouts, bursts and fires, that could result in death, personal injury, property damage, environmental pollution or loss of production. Any of these hazards and risks can result in environmental liabilities, personal injury claims and property damage from the release of hydrocarbons.

Defects in specialty tubing products could result in death, personal injury, property damage, environmental pollution, damage to equipment and facilities or loss of production.

We normally warrant the oilfield products and specialty tubing products we sell or distribute in accordance with customer specifications, but as we pursue our business strategy of providing customers with additional services, such as Rig Direct[®], we may be required to warrant that the goods we sell and services we provide are fit for their intended purpose. Actual or claimed defects in our products may give rise to claims against us for losses suffered by our customers and expose us to claims for damages. The insurance we maintain will not be available in cases of gross negligence or willful misconduct, in other cases may not be adequate or available to protect us in the event of a claim, its coverage may be limited, canceled or otherwise terminated, or the amount of our insurance may be less than the related impact on enterprise value after a loss. Similarly, our sales of tubes and components for the automotive industry subject us to potential product liability risks that could extend to being held liable for the costs of the recall of automobiles sold by car manufacturers and their distributors.

Limitations on our ability to protect our intellectual property rights, including our trade secrets, could cause a loss in revenue and any competitive advantage we hold

Some of our products or services, and the processes we use to produce or provide them, have been granted patent protection, have patent applications pending, or are trade secrets. Our business may be adversely affected if our patents are unenforceable, the claims allowed under our patents are not sufficient to protect our technology, our patent applications are denied or our trade secrets are not adequately protected. Our competitors may be able to independently develop technology that is similar to ours without infringing on our patents or gaining access to our trade secrets, which could adversely affect our financial condition, results of operations and cash flows.

Cyberattacks could have a material adverse impact on our business and results of operations

We rely heavily on information systems to conduct our operations and digital technologies have an increasingly significant role across our business. Although we devote significant resources to protect our systems and data and we continually monitor external developments and available information on threats and security incidents, we have experienced and will continue to experience varying degrees of cyber incidents in the normal conduct of our business, which may occasionally include sophisticated cybersecurity threats such as unauthorized access to data and systems, loss or destruction of data, computer viruses or other malicious code, phishing, spoofing and/or cyberattacks. These threats often arise from numerous sources, not all of which are within our control, such as fraud or malice from third parties, including fraud involving business email compromises, failures of computer servers or other accidental technological failures, electrical or telecommunication outages or other damage to our property or assets.

Cybersecurity threats represent one of the most significant risks for most businesses. Cyberattack attempts continued to increase throughout 2022 in the post-pandemic context, primarily due to widespread adoption of remote work practices among our employees, customers and suppliers and the increasing digitalization of work. Cybersecurity was a major topic of discussion at the World Economic Forum's annual 2023 meeting in Davos, Switzerland, where experts warned that cyberattacks are increasing in sophistication and frequency and called for a global response to cybersecurity threats. Microsoft has indicated that the manufacturing industry is the industry most exposed to ransomware attacks. For example, in 2022, we suffered seven cybersecurity attacks, none of which led to known breaches of our business-critical IT systems and, as such, did not result in any material business impact. In this context, we continue to seek to improve cybersecurity controls, processes and procedures to monitor, detect and respond to hacking, malware infection, cybersecurity compromise and other risks. In addition, we continued with cybersecurity awareness and ethical phishing campaigns aimed at protecting us against cyberthreats, and tailored cybersecurity training programs addressed to our executives and employees. In order to improve the capacity to bounce back quickly from a cyber-incident, Tenaris has also adopted cyber-resilience as part of its cybersecurity strategy.

Given the rapidly evolving nature of cyberthreats, there can be no assurance that the systems we have designed to prevent or limit the effects of cyber incidents or attacks will be adequate, and such incidents or attacks could have a material adverse impact on our systems. While we attempt to mitigate these risks, we remain vulnerable to additional known or unknown threats, including theft, misplacement or loss of data, programming errors, employee errors and/or dishonest behavior that could potentially lead to the compromising of sensitive information, improper use of our systems or networks, as well as unauthorized access, use, disclosure, modification or destruction of such information, systems and/or networks. If our systems for protecting against cybersecurity risks are circumvented or breached, this could also result in disruptions to our business operations (including but not limited to, defective products, production downtimes or loss of productivity), access to our financial reporting systems, the loss of access to critical data or systems, misuse or corruption of critical data and proprietary information (including our intellectual property and customer data), as well as damage to our reputation with our customers and the market, failure to meet customer requirements, customer dissatisfaction and/or regulatory fines and penalties (including for inadequate protection of personal data and/or failure to notify the competent authorities for such breach), damages and harm to the environment and people, or other financial costs and losses. In addition, given that cybersecurity threats continue to evolve, we will be required to devote additional resources in the future to enhance our protective measures or to investigate and/or remediate any cybersecurity vulnerabilities. Additionally, although we have considered contract insurance coverage options for cyber risk, we do not currently maintain cybersecurity insurance, and the insurance we carry for property damage and general liability may not be adequate or available to protect us from damages derived from cyberthreats or coverage may be limited. Moreover, any investigation of a cyberattack would take time before completion, during which we would not necessarily know the extent of the actual or potential harm or how best to remediate it, and certain errors or actions could be repeated or compounded before duly discovered and remediated (all or any of which could further increase the costs and consequences arising out of such cyberattack). In addition, failure to adequately and timely monitor our hardware and software systems and applications to prevent or manage technology obsolescence risks may result in increased costs, increased operational risk of service failure, loss of technology competitiveness and reputational risk.

Risks Relating to the Structure of the Company

The Company's dividend payments depend on the results of operations and financial condition of its subsidiaries and could be restricted by legal, contractual or other limitations or tax changes

The Company is a holding company and conducts all its operations through subsidiaries. Dividends or other intercompany transfers of funds from those subsidiaries are the Company's primary source of funds to pay its expenses, debt service and dividends and to repurchase shares or ADSs.

The ability of the Company's subsidiaries to pay dividends and make other payments to us will depend on their results of operations and financial condition. If earnings and cash flows of the Company's operating subsidiaries are substantially reduced, the Company may not be in a position to meet its operational needs or to pay dividends. In addition, such dividends and other payments could be restricted by applicable corporate and other laws and regulations, including those imposing foreign exchange controls or restrictions on the repatriation of capital or the making of dividend payments, and agreements and commitments of such subsidiaries. For information concerning potential restrictions on our ability to collect dividends from certain subsidiaries, see "Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition" and "Financial Information – Consolidated Statements and Other Financial Information – Dividend Policy".

The Company's ability to pay dividends to shareholders is subject to legal and other requirements and restrictions in effect at the holding company level. For example, the Company may only pay dividends out of net profits, retained earnings and distributable reserves and premiums, each as defined and calculated in accordance with Luxembourg law and regulations. In addition, the Company's dividend distributions (which are currently imputed to a special tax reserve and are therefore not subject to Luxembourg withholding tax) may be subject to Luxembourg withholding tax if current Luxembourg tax law were to change.

The Company's controlling shareholder may be able to take actions that do not reflect the will or best interests of other shareholders

As of the date of this annual report, San Faustin beneficially owned 60.45% of our outstanding voting shares. Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin ("RP STAK"), holds voting rights in San Faustin sufficient to control San Faustin. As a result, RP STAK is indirectly able to elect a substantial majority of the members of the Company's board of directors and has the power to determine the outcome of most actions requiring shareholder approval, including, subject to the requirements of Luxembourg law, the payment of dividends. The decisions of the controlling shareholder may not reflect the will or best interest of other shareholders. In addition, the Company's articles of association permit the Company's board of directors to waive, limit or suppress preemptive rights in certain cases. Accordingly, the Company's controlling shareholder may cause its board of directors to approve in certain cases an issuance of shares for consideration without preemptive rights, thereby diluting the minority interest in the Company. See "Risks Relating to shares and ADSs – Holders of shares and ADSs in the United States may not be able to exercise preemptive rights in certain cases".

Risks Relating to shares and ADSs

Holders of shares or ADSs may not have access to as much information about the Company as they would in the case of a U.S. domestic issuer

There may be less publicly available information about the Company than is regularly published by or about U.S. domestic issuers. Also, corporate and securities regulations governing Luxembourg companies may not be as extensive as those in effect in other jurisdictions and U.S. securities regulations applicable to foreign private issuers, such as the Company, differ in certain respects from those applicable to U.S. domestic issuers. Furthermore, IFRS, the accounting standards in accordance with which the Company prepares its consolidated financial statements, differ in certain material aspects from U.S. GAAP. For a summary of the significant ways in which the Company's corporate governance practices differ from the corporate governance standards required for domestic companies by the New York Stock Exchange ("NYSE"), see "Corporate Governance Statement – Summary of differences with NYSE standards".

Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders

Certain shareholders' rights under Luxembourg law, including the rights to participate and vote at general meetings of shareholders, to include items on the agenda for the general meetings of shareholders, to receive dividends and distributions, to bring actions, to examine our books and records and to exercise appraisal rights may not be available to holders of ADSs, or may be subject to restrictions and special procedures for their exercise, as holders of ADSs only have those rights that are expressly granted to them in the deposit agreement. Deutsche Bank Trust Company Americas, as depositary under the ADS deposit agreement, or the Depositary, through its custodian agent, is the registered shareholder of the deposited shares underlying the ADSs, and therefore only the Depositary can exercise the shareholders' rights in connection with the deposited shares. For example, if the Company makes a distribution in the form of securities, the Depositary is allowed, at its discretion, to sell the right to acquire those securities on your behalf and to instead distribute the net proceeds to you. Also, under certain circumstances, such as the Company's failure to provide the Depositary with voting materials on a timely basis, you may not be able to vote at general meetings of shareholders by giving instructions to the Depositary. If the Depositary does not receive voting instructions from the holder of ADSs by the prescribed deadline, or the instructions are not in proper form, then the Depositary shall deem such holder of ADSs to have instructed the Depositary to vote the underlying shares represented by ADSs in favor of any proposals or recommendations of the Company (including any recommendation by the Company to vote such underlying shares on any given issue in accordance with the majority shareholder vote on that issue), for which purposes the Depositary shall issue a proxy to a person appointed by the Company to vote such underlying shares represented by ADSs in favor of any proposals or recommendations of the Company. Under the ADS deposit agreement, no instruction shall be deemed given and no proxy shall be given with respect to any matter as to which the Company informs the Depositary that (i) it does not wish such proxy given, (ii) it has knowledge that substantial opposition exists with respect to the action to be taken at the meeting, or (iii) the matter materially and adversely affects the rights of the holders of ADSs.

Holders of shares and ADSs in the United States may not be able to exercise preemptive rights in certain cases

Pursuant to Luxembourg corporate law, existing shareholders of the Company are generally entitled to preferential subscription rights (preemptive rights) in the event of capital increases and issues of shares against cash contributions. Under the Company's articles of association, the board of directors has been authorized to waive, limit or suppress such preemptive subscription rights. Notwithstanding the waiver of any preemptive subscription rights, any issuance of shares for cash within the limits of the authorized share capital shall be subject to the preemptive subscription rights of existing shareholders, except (i) any issuance of shares (including without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash; and (ii) any issuance of shares (including by way of free shares or at discount), up to an amount of 1.5% of the issued share capital of the Company, to directors, officers, agents, employees of the Company, its direct or indirect subsidiaries or its affiliates (or, collectively, the beneficiaries), including without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive of the beneficiaries or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit). For further details, see "Corporate Governance Statement – Corporate Governance".

Holders of ADSs in the United States may, in any event, not be able to exercise any preemptive rights, if granted, for shares underlying their ADSs unless additional shares and ADSs are registered under the U.S. Securities Act of 1933, as amended, ("Securities Act"), with respect to those rights, or an exemption from the registration requirements of the Securities Act is available. The Company intends to evaluate, at the time of any rights offering, the costs and potential liabilities associated with the exercise by holders of shares and ADSs of the preemptive rights for shares, and any other factors it considers appropriate at the time, and then to make a decision as to whether to register additional shares. The Company may decide not to register any additional shares, requiring a sale by the Depositary of the holders' rights and a distribution of the proceeds thereof. Should the Depositary not be permitted or otherwise be unable to sell preemptive rights, the rights may be allowed to lapse with no consideration to be received by the holders of the ADSs.

It may be difficult to obtain or enforce judgments against the Company outside Luxembourg

The Company is a *société anonyme* organized under the laws of the Grand Duchy of Luxembourg, and most of its assets are located in other jurisdictions. Furthermore, most of the Company's directors and officers reside in other jurisdictions. As a result, investors may not be able to effect service of process upon the Company or its directors or officers. Investors may also not be able to enforce against the Company or its directors or officers in the investors' domestic courts, judgments predicated upon the civil liability provisions of the domestic laws of the investors' home countries. Likewise, it may be difficult for investors not domiciled in Luxembourg to bring an original action in a Luxembourg court predicated upon the civil liability provisions of other securities laws, including U.S. federal securities laws, against the Company, its directors or its officers. There is also uncertainty with regard to the enforceability of original actions of civil liabilities predicated upon the civil liability provisions of securities laws, including U.S. federal securities laws, outside the jurisdiction where such judgments have been rendered; and enforceability will be subject to compliance with procedural requirements under applicable local law, including the condition that the judgment does not violate the public policy of the applicable jurisdiction.

Information on the Company**Overview**

Tenaris is a leading global manufacturer and supplier of steel pipe products and related services for the world's energy industry and other industrial applications. Our customers include most of the world's leading oil & gas companies, and we operate an integrated network of steel pipe manufacturing, research, finishing and service facilities with industrial operations in the Americas, Europe, the Middle East, Asia and Africa.

Although our operations are focused on serving the oil & gas industry, we also supply pipes and tubular components for non-energy applications. We develop and supply products and services for low-carbon energy applications such as geothermal wells, waste-to-energy (bio-energy) power plants, hydrogen storage and transportation, and carbon capture and storage.

Through an integrated global network of R&D, manufacturing, and service facilities, and a team of 25,000 people worldwide, we work with our customers to meet their needs in a timely manner, observing the highest levels of product performance and reliability.



History and Development of the Company

The Company

The Company is a *société anonyme* organized under the laws of the Grand Duchy of Luxembourg. It was established on December 17, 2001. The Company’s registered office is located at 26 Boulevard Royal, 4th Floor, L-2449, Luxembourg. Its agent for U.S. federal securities law purposes is Tenaris Global Services (U.S.A.) Corporation (“TEUS”), located at 2200 West Loop South, Suite 800, Houston, TX 77027.

Tenaris

Tenaris began with the formation of Siderca, the sole Argentine producer of seamless steel pipe products, by San Faustin's predecessor in Argentina in 1948. We acquired Siat S.A., an Argentine welded steel pipe manufacturer, in 1986. We grew organically in Argentina and then, in the early 1990s, began to evolve beyond this initial base into a global business through a series of strategic investments. As of the date of this annual report, our investments include controlling interests in several manufacturing companies:

- Tamsa, the sole Mexican producer of seamless steel pipe products;
- Dalmine S.p.A. ("Dalmine"), a leading Italian producer of seamless steel pipe products;
- Confab, the leading Brazilian producer of welded steel pipe products;
- Algoma Tubes Inc. ("AlgomaTubes"), a Canadian producer of seamless and welded steel pipe products;
- S.C. Silcotub S.A. ("Silcotub"), a leading Romanian producer of seamless steel pipe products;
- Maverick Tube Corporation ("Maverick"), a U.S. producer of seamless and welded steel pipe products;
- Tenaris TuboCaribe Ltda. ("TuboCaribe"), a welded pipe mill producing OCTG products including finishing of welded and seamless pipes, line pipe products, and couplings in Colombia;
- Hydril, a North American manufacturer of premium connection products for oil and gas drilling production;
- PT Seamless Pipe Indonesia Jaya ("SPIJ"), an Indonesian OCTG processing business with heat treatment and premium connection threading facilities;
- Tenaris Qingdao Steel Pipes Ltd. ("Tenaris Qingdao"), a Chinese producer of premium joints, couplings and tubular components for airbags;
- Pipe Coaters Nigeria Ltd. ("Pipe Coaters"), the leading company in the Nigerian coating industry;
- Tenaris Bay City Inc. ("Tenaris Bay City"), a state-of-the-art seamless pipe mill in Bay City, Texas;
- Saudi Steel Pipe Company ("SSPC"), a Saudi producer of welded steel pipe products;
- IPSCO, a North American manufacturer of seamless and welded steel pipes;
- Tenaris Baogang Bautou Steel Pipes, Ltd. ("TBSP"), a Chinese company that owns a premium connection threading facility in Baotou, China, in which we have a 60% interest; *and*
- sucker rod businesses, in various countries.

We also own strategic interests in:

- Ternium S.A. (“Ternium”), one of the leading flat steel producers of the Americas with operating facilities in Mexico, Brazil, Argentina, Colombia, the southern United States and Central America;
- Usiminas, a Brazilian producer of high quality flat steel products used in the energy, automotive and other industries;
- Techgen, an electric power plant in Mexico; *and*
- Global Pipe Company (“GPC”), a Saudi-German joint venture which manufactures longitudinal submerged arc welded (“LSAW”) pipes.

In addition, we have established a global network of pipe finishing, distribution and service facilities with a direct presence in most major oil and gas markets and a global network of R&D centers.

For information on Tenaris’s principal capital expenditures and divestitures, see “Information on the Company – Business Overview – Capital Expenditure Program”.

Business Overview

Our business strategy is to consolidate our position as a leading global supplier of integrated product and service solutions to the energy and other industries and to adapt to the energy transition through reducing the carbon emissions in our operations and on developing and supplying products and services for low-carbon energy applications by:

- pursuing strategic investment opportunities in order to further strengthen our presence in local and global markets;
- expanding our comprehensive range of products and developing new products designed to meet the needs of customers operating in challenging environments, including low carbon energy applications, such as hydrogen and carbon capture and storage;
- enhancing our offering of technical, digital and supply chain integration services designed to enable customers to optimize well planning and integrity, simplify operations and reduce overall operating costs; *and*
- securing an adequate supply of production inputs and reducing the manufacturing costs and carbon intensity of our core products.

Pursuing strategic investment opportunities and alliances

We have a solid record of growth through strategic investments and acquisitions. We pursue selective strategic investments and acquisitions as a means to expand our operations and presence in select markets, enhance our global competitive position and capitalize on potential operational synergies. For example:

- In January 2020, we acquired IPSCO, a North American manufacturer of seamless and welded steel pipes, from PAO TMK (“TMK”), with facilities located mainly in the midwestern and northeastern regions of the United States, and a steel shop in Koppel, Pennsylvania.
- In December 2020 we entered into a joint venture with Inner Mongolia Baotou Steel Union Co., Ltd. (“Baotou Steel”) to build a premium connection threading facility to finish steel pipes produced by our joint venture partner in Baotou, China, for sale to the domestic market. The plant started operations in the first quarter of 2022.
- We are building a wind farm in Argentina at a cost of approximately \$200 million, which is expected to reduce Tenaris’s CO₂ emissions in that country by around 150,000 tons per year, and supply close to 50% of the energy requirements at the integrated seamless pipe mill in Campana, Argentina. This investment is expected to be completed during 2023.

Our track record on the acquisition of companies is described above in “History and Development of the Company – Tenaris”.

Expanding our range of products including the development of new products for the energy transition

We have developed an extensive range of high-value products suitable for most of our customers' operations using our network of specialized R&D facilities and by investing in our manufacturing facilities. As our customers expand their operations, we seek to supply high-value products that reduce costs and enable them to operate safely in challenging environments, including those for low-carbon applications associated with the energy transition.

As suppliers of tubular products and services to the energy industry, the energy transition currently underway provides an important opportunity to develop new products and services for potentially fast-growing segments like hydrogen transportation and storage, carbon capture and sequestration ("CCS") and geothermal installations. We have developed a range of technologies that are particularly suited for use in hydrogen storage and transportation, where we are seeing fast growth in demand for large, high-pressure vessels used in the build out of hydrogen refueling stations for heavy-duty vehicles and buses in Europe and California. We are also seeing increasing interest from customers for developing CCS projects.

Enhancing our offering of technical, digital and supply chain integration services - Rig Direct® - and extending their global deployment

We continue to enhance our offering of Rig Direct® services and extend their deployment worldwide. For many years, we have provided these services, managing customer inventories and directly supplying pipes to their rigs on a just-in-time basis, complemented by technical advice and assistance on the selection of materials and their use in the field, in markets like Mexico and Argentina. In response to changes in market conditions and the increased focus of customers on reducing costs and improving the efficiency of their operations, the extent and deployment of our Rig Direct® services has been extended throughout North America and in other markets around the world (e.g., Colombia, North Sea, Romania and the United Arab Emirates) and now include digital and more extensive supply chain integration services. Through the provision of Rig Direct® services, we seek to integrate our operations with those of our customers using digital technologies to shorten the supply chain and simplify operational and administrative processes, as well as technical services for well planning and well integrity, to reduce costs, improve safety and minimize environmental impact. They are also intended to differentiate us from our competitors and further strengthen our relationships with customers worldwide through long-term agreements.

Securing inputs for our manufacturing operations

We seek to secure our existing sources of raw material and energy inputs, and to gain access to new sources of low-cost inputs which can help us maintain or reduce the cost of manufacturing our core products and reduce the carbon emissions intensity of our operations over the long term. We aim to achieve a vertically integrated value chain for our production. To this end, we purchase most of our supplies through Exiros, a specialized procurement company the ownership of which we share with Ternium. Exiros offers us integral procurement solutions, supplier sourcing activities; category organized purchasing; suppliers' performance administration; and inventory management. In addition, through IPSCO's acquisition, we have secured a steel shop in Koppel, Pennsylvania, which is our first steel shop in the United States and provides vertical integration through domestic production of a significant part of our steel bar needs in the United States.

Our Competitive Strengths

We believe our main competitive strengths include:

- our global production, commercial and distribution capabilities, offering a full product range with flexible supply options backed up by local service capabilities in important oil and gas producing and industrial regions around the world;
- our ability to develop, design and manufacture technologically advanced products;
- our solid and diversified customer base and historic relationships with major international oil and gas companies around the world, and our strong and stable market shares in most of the countries in which we have manufacturing operations;
- our proximity to our customers;

- our human resources around the world with their diverse knowledge and skills;
- our low-cost operations, primarily at state-of-the-art, strategically located production facilities with favorable access to raw materials, energy and labor, and a solid track-record of operating experience; *and*
- our strong financial condition.

Business Segments

Tenaris has one major business segment, “Tubes”, which is also the reportable operating segment. All other business activities and operating segments that are not required to be separately reported, are disclosed in the “Others” segment.

The Tubes segment includes the production and sale of both seamless and welded steel tubular products and related services mainly for the energy industry, particularly casing and tubing used in oil and gas drilling operations, and line pipe used in the transportation and processing of oil and gas, but also other industrial applications. Our production processes include the production of steel and its transformation into tubular products. Business activities included in this segment are mainly dependent on the oil and gas industry worldwide, as this industry is a major consumer of steel pipe products. Demand for steel pipe products from the energy industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of such wells. Major oil and gas companies are beginning to adapt their strategies and increase their investments in renewable energies to address the energy transition while maintaining their capability to meet market demand for oil and gas, and reducing the emissions from their operations. As the energy transition advances, demand for our products and services from low-carbon energy applications, such as geothermal, hydrogen and carbon capture and storage, is expected to increase while demand for oil and gas applications may decrease.

Sales are generally made to end users, with exports being done through a centrally managed global distribution network and domestic sales made through local subsidiaries.

The “Others” segment includes all other business activities and operating segments related to the production and sale of sucker rods, tubes used for plumbing and construction applications, coiled tubing used in oil and gas extraction activities, oil and gas services including fracking and coiled tubing services in Argentina, the sale of energy and raw materials that exceed our internal requirements, and industrial equipment of various specifications and for diverse applications (this business was discontinued in 2022).

For more information on our business segments, see “II C. Accounting Policies – Segment information” to our audited consolidated financial statements included in this annual report.

Our Products

Our principal finished products are seamless and welded steel casing and tubing, line pipe and various other mechanical and structural steel pipes for different uses. Casing and tubing are also known as oil country tubular goods (“OCTG”). We manufacture our steel pipe products in a wide range of specifications, which vary in diameter, length, thickness, finishing, steel grades, coating, threading and coupling. For more complex applications, including high pressure and high temperature applications, seamless steel pipes are usually specified and, for some standard applications, welded steel pipes can also be used. In addition to oil and gas applications, many of our products can also be used in low-carbon energy applications, such as geothermal, hydrogen and carbon capture and storage.

Casing. Steel casing is used to sustain the walls of oil and gas wells during and after drilling.

Tubing. Steel tubing is used to conduct crude oil and natural gas to the surface after drilling has been completed.

Line pipe. Steel line pipe is used to transport crude oil and natural gas from wells to refineries, storage tanks and loading and distribution centers.

Mechanical and structural pipes. Mechanical and structural pipes are used by general industry for various applications, including the transportation of other forms of gas and liquids under high pressure.

Cold-drawn pipe. The cold-drawing process permits the production of pipes with the diameter and wall thickness required for use in boilers, superheaters, condensers, heat exchangers, automobile production and several other industrial applications.

Premium joints and couplings. Premium joints and couplings are specially designed connections used to join lengths of steel casing and tubing for use in high temperature or high pressure environments. A significant portion of our steel casing and tubing products are supplied with premium joints and couplings. We own an extensive range of premium connections, and following the integration of the premium connections business of Hydril, we have marketed our premium connection products under the “TenarisHydril” brand name. In addition, we hold licensing rights to manufacture and sell the “Atlas Bradford” range of premium connections outside the United States and, since our acquisition of IPSCO in January 2020, we own the “Ultra” and “TORQ” ranges of premium connections.

Coiled tubing. Coiled tubing is used for oil and gas drilling and well workovers and for subsea pipelines.

Other products. We also manufacture sucker rods used in oil extraction activities, tubes used for plumbing and construction applications, oilfield / hydraulic fracturing services, energy and raw materials that exceed our internal requirements, and industrial equipment (discontinued in 2022).

Production Process and Facilities

We operate relatively low-cost production facilities, which we believe is the result of:

- state-of-the-art, strategically located plants;
- favorable access to high quality raw materials, energy and labor at competitive costs;
- operating history of almost 70 years, which translates into solid industrial know-how;
- constant benchmarking and best-practices sharing among the different facilities;
- increasing specialization of each of our facilities in specific product ranges; *and*
- extensive use of digital technologies in our production processes.

Our seamless pipes production and processing facilities are located in North and South America, Europe and Asia. Our welded pipes production facilities are located in North and South America and in Saudi Arabia. We also produce steel bars in the United States, Mexico, Argentina, Italy and Romania using the scrap-based electric arc furnace process that results in relatively low carbon emissions compared to primary steelmaking processes. We produce couplings in Argentina, China, Colombia, Indonesia, Mexico and Romania, and pipe fittings in Mexico. In addition to our pipe threading and finishing facilities at our integrated pipe production facilities, we have additional pipe and/or pipe accessory threading facilities that manufacture products in accordance with the specifications of the American Petroleum Institute (“API”), and premium joints in Canada, China, Ecuador, Indonesia, Kazakhstan, Nigeria, Saudi Arabia, the United Kingdom and the United States, and we are currently building a new premium OCTG threading facility in Abu Dhabi, U.A.E., which is expected to be completed by year-end. In addition, we have sucker rods production facilities in Argentina, Brazil, Mexico, Romania, and the United States and a coiled tubing production facility in the United States.

The following table shows our aggregate installed production capacity of seamless and welded steel pipes and steel bars at the dates indicated as well as the aggregate actual production volumes for the periods indicated.

	At or for the year ended December 31,		
	2022	2021	2020
<i>Thousands of tons</i>			
Steel Bars			
Effective Capacity (annual) ⁽¹⁾	4,485	4,485	4,485
Actual Production	3,746	3,141	1,749
Tubes – Seamless			
Effective Capacity (annual) ⁽¹⁾	4,715	4,680	4,680
Actual Production	3,347	2,736	1,914
Tubes – Welded			
Effective Capacity (annual) ⁽¹⁾	3,110	3,155	3,780
Actual Production	527	237	268

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In 2021, our production capacity for welded pipes decreased as a result of the dismantling of our Canadian facility and one of our U.S. facilities. Part of the equipment dismantled at our Calgary facility in Alberta was modernized and relocated along with new equipment to our Sault Ste. Marie facility in Ontario, as part of an investment in a repositioning plan for our industrial activities, which was completed in the second half of 2022.

Furthermore, in 2022 we revised the capacity of some of our seamless and welded pipe mills in the United States following the integration of the IPSCO plants acquired in 2020 and taking into account current market and production mix of products. Consequently, total seamless capacity increased slightly in respect to the previous year, while welded capacity shows a slight reduction. Capacity of seamless pipes includes NKK Tubes which ceased operations in June 2022.

Production Facilities – Tubes

North America

In Mexico, we have a fully integrated seamless pipe manufacturing facility, a threading plant and a pipe fittings facility; in the United States, one steel shop, two seamless pipe rolling mills, four welded pipe manufacturing facilities and four threading plants; and in Canada an integrated facility with capacity for seamless and welded pipes plus a threading plant.

Mexico

In Mexico, our fully integrated seamless pipe manufacturing facility is located near the major exploration and drilling operations of Pemex, about 13 kilometers from the port of Veracruz on the Gulf of Mexico. Situated on an area of 650 hectares, the plant includes two state-of-the-art seamless pipe mills and has an installed annual production capacity of approximately 1,230,000 tons of seamless steel pipes (with an outside diameter range of 2 to 20 inches) and 1,200,000 tons of steel bars. The plant is served by two highways and a railroad and is close to the port of Veracruz, which reduces transportation costs and facilitates product shipments to export markets.

The Veracruz facility comprises:

- a steel shop, including an electric arc furnace, refining equipment, vacuum degassing, five-strand continuous caster and a cooling bed;
- a multi-stand pipe mill, including a rotary furnace, direct piercing equipment, mandrel mill with retained mandrel, sizing mill and a cooling bed;
- a premium quality finishing (“PQF”) technology mill (2³/₈ to 7 inches), including a rotary furnace, direct piercing equipment, mandrel mill with retained mandrel, sizing mill and a cooling bed;
- a pilger pipe mill, including a rotary furnace, direct piercing equipment, a reheating furnace, sizing mill and a cooling bed;
- six finishing lines, including heat treatment lines, upsetting machines and threading and inspection equipment;
- a cold-drawing mill; *and*
- an automotive components production center.

The major operational units at the Veracruz facility and the corresponding effective annual production capacity (in thousands of tons per year, except for the auto components facility, which is in millions of parts) as of December 31, 2022, are as follows:

	Effective Annual Production Capacity (thousands of tons) (1)
Steel Shop	1,200
Pipe Production	
Multi-Stand Pipe Mill	700
PQF Mill	450
Pilger Mill	80
Cold-Drawing Mill	35
Auto Components Facility	30

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In Veracruz, located near our fully integrated seamless pipe manufacturing facility, we have a threading plant, which produces premium connections and accessories.

In addition to the Veracruz facilities, we operate a manufacturing facility near Monterrey in the state of Nuevo León, Mexico, for the production of weldable pipe fittings. This facility has an annual production capacity of approximately 15,000 tons.

United States

In the United States we have the following production facilities:

Koppel, Pennsylvania: Acquired in 2020, the facility is located on an area of 89 hectares and consists of a steel shop with an annual production capacity of approximately 430,000 tons of steel bars and a heat treatment line. Following a \$15 million investment which expanded the steel shop's size range capabilities, it is now capable of producing bars in a range of sizes to provide a reliable source of billets to supply both our Bay City and Ambridge seamless pipe rolling mills. With the completion of this investment, the facility provides vertical integration through domestic production of a significant part of Tenaris's steel bar needs in the United States.

Bay City, Texas: Our 1.2 million square feet greenfield seamless mill was inaugurated in December 2017 and is located on an area of 552 hectares. The facility is the result of an investment of \$1.8 billion and includes a state-of-the-art rolling mill with a capacity of approximately 650,000 tons per year (with an outside diameter range of 4 ½ to 9 5/8 inches), as well as a heat treatment line, a finishing line and a logistics center.

The Bay City facility comprises:

- a retained mandrel mill PQF;
- a fully automated intermediate warehouse;
- a heat treatment line; *and*
- a finishing line.

Ambridge, Pennsylvania: A seamless rolling mill located on an area of 19 hectares, with a capacity of approximately 365,000 tons per year (with an outside diameter range of 2³/₈ through 5¹/₂ inches).

Hickman, Arkansas: This facility, which is our main U.S. welded production facility and covers an area of 78 hectares, processes steel coils to produce electric resistance welded (“ERW”) OCTG and line pipe with an outside diameter range from 2³/₈ to 16 inches and has an annual production capacity of approximately 670,000 tons. It includes:

- a plant comprising two welding lines producing 2³/₈ through 5¹/₂ inches API products with two finishing lines and two heat treatment lines;
- a plant comprising of a welding line producing 6 through 16 inches API products and a finishing line; *and*
- a coating facility coating sizes up to 16 inches.

Blytheville, Arkansas: Located 2.5 miles from our Hickman facility; this facility produces ERW OCTG and performs finishing operations including heat treatment, inspection, upsetting and threading. The facility has five lines: one welding line with an annual capacity of 200,000 tons between 2³/₈ to 4¹/₂ inches outside diameter pipe; one Heat Treatment line, one inspection line and one threading line for pipes between 2³/₈ and 5¹/₂ inches outside diameter.

Conroe, Texas: Located in an area of approximately 26 hectares north of Houston, Texas and has a capability of processing pipes with an outside diameter from 4¹/₂ to 8⁵/₈ inches. The plant has four production lines: one ERW welding line with a capacity of approximately 200,000 tons; one heat treatment line, one inspection line and one threading line.

Baytown, Texas: Located in an area of approximately 25 hectares east of Houston, Texas the facility heat-treats and finishes OCTG. The facility has six lines: one heat treatment, and one inspection line with outside diameter capability from 4¹/₂ to 7⁵/₈ inches and four Threading lines capable of processing pipes 4¹/₂ to 13⁵/₈ inches outside diameter with a capacity of 220,000 tons.

Wilder, Kentucky: Located near the natural gas deposits of the Marcellus Shale, this 113 hectares facility produces both ERW casing and line pipe from 7 to 16 inches outside diameter. The facility has two lines: one welding line with annual capacity of 360,000 tons; and one finishing line. Additionally this facility has a coating line. This facility is currently idle.

In addition, we have facilities for threading and finishing pipes in Houston, Texas and Brookfield, Ohio.

	Effective Annual Production Capacity (thousands of tons) (1)
Steel Shop	430
Welded Pipe Production	1,430
Seamless Pipe Production	1,015

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In response to the continuing recovery of activity in the U.S. oil and gas industry, during 2022 we continued our U.S. industrial ramp up, by re-opening the quench and tempering line in Koppel and restarting ERW production in Conroe and Hickman. In connection with this process we hired more than 1,500 employees during the year and plan to continue increasing our workforce during 2023.

Canada

In Canada, we have a manufacturing facility located in Sault Ste. Marie, near the mouth of Lake Superior in the province of Ontario. The facility includes a seamless pipe hot rolling mill (retained mandrel mill and stretch reducing mill), a welded pipe ERW mill, a heat treatment line, three finishing lines (one with threaders for API and semi-premium connections) and a Premium threading line.

For seamless, the effective annual production capacity is 300,000 tons with an outside diameter range of 3¹/₂ to 9⁷/₈ inches. We mainly use steel bars produced by our facilities in Romania, Italy, Mexico, Argentina and United States.

For welded, the effective annual production capacity is 200,000 tons. The outside diameter range of the line is from 4 1/2 to 12 3/4 inches. The facility includes a slitter, which cuts the master coils into the required dimensions for each OD. The line commenced operations in the second half of 2022 as part of an investment plan to reposition our industrial footprint and strengthen the competitiveness and domestic production capabilities of the Canadian market.

	Effective Annual Production Capacity (thousands of tons) (1)
Seamless Pipe Production	300
Welded Pipe Production	200

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In addition, we have a threading facility in Nisku, Alberta, near the center of Western Canadian drilling area. The facility has ten computer numerical control (“CNC”) lathes dedicated to premium connections and accessories, including related repairs.

South America

In Argentina, we have a fully integrated seamless pipe facility. In addition, we have welded pipe manufacturing facilities in Argentina, Brazil and Colombia.

Argentina

Our principal manufacturing facility in South America is a fully integrated plant on the banks of the Paraná river, near the city of Campana, approximately 80 kilometers north from the city of Buenos Aires, Argentina. Situated on over 300 hectares, the plant includes a state-of-the-art seamless pipe facility and has an effective annual production capacity of approximately 900,000 tons of seamless steel pipe (with an outside diameter range of 1 1/4 to 10 3/4 inches) and 1,300,000 tons of steel bars.

The Campana facility comprises:

- a direct reduced iron (“DRI”) production plant;
- a steel shop with two production lines, each including an electric arc furnace, refining equipment, four-strand continuous caster and a cooling bed;
- two continuous mandrel mills, each including a rotary furnace, direct piercing equipment and a cooling bed and, one of them, also including a stretch reducing mill;
- seven finishing lines, including heat treatment lines, upsetting machines, threading and inspection equipment and make-up facilities;
- a cold-drawing mill; *and*
- a port on the Paraná river for the supply of raw materials and the shipment of finished products.

Our local electric energy requirements are satisfied through purchases in the local market and by a 35 megawatts power generating plant located within the Campana facility.

The major operational units at the Campana facility and corresponding effective annual production capacity (in thousands of tons per year) as of December 31, 2022, are as follows:

	Effective Annual Production Capacity (thousands of tons) (1)
DRI	960
Steel Shop	
Continuous Casting I	530
Continuous Casting II	770
Pipe Production	
Mandrel Mill I	330
Mandrel Mill II	570
Cold-Drawing Mill	20

⁽¹⁾ Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In addition to our main integrated seamless pipe facility, we also have two welded pipe manufacturing facilities in Argentina. One is located at Valentín Alsina, south of the city of Buenos Aires. This facility includes ERW and submerged arc welding (“SAW”) rolling mills with one spiral line. The facility was originally opened in 1948 and processes steel coils and plates to produce welded steel pipes with an outside diameter range of 4 ½ to 80 inches, which are used for the conveying of fluids at low, medium and high pressure and for mechanical and structural purposes. The facility has an annual production capacity of approximately 400,000 tons. The other welded facility, located at Villa Constitución in the province of Santa Fe, has an annual production capacity of approximately 80,000 tons of welded pipes with an outside diameter range of 1 to 8 inches.

Activity level in our plants increased consistently throughout the year 2022, accompanying demand recovery in both local and global markets.

In February 2022, we approved an investment plan to build a wind farm in Argentina at a cost of approximately \$200 million which is expected to reduce our CO₂ emissions in the country by around 150,000 tons per year and supply close to 50% of the electric energy requirements at our Siderca integrated seamless pipe mill. This investment is expected to be completed during 2023.

Brazil

In Brazil, we have the Confab welded pipe manufacturing facility, located at Pindamonhangaba, 160 kilometers northeast from the city of São Paulo. This facility includes an ERW rolling mill and a SAW longitudinal rolling mill. The facility, which was originally opened in 1974, processes steel coils and plates to produce welded steel pipes with an outside diameter range from 5 ½ to 48 inches for various applications, including OCTG and line pipe for oil, petrochemical and gas applications. The facility also supplies anticorrosion pipe coating made of extruded polyethylene or polypropylene, external and internal fusion bonded epoxy, thermal insulation, concrete weight coating and paint for internal pipe coating. The facility has an annual production capacity of approximately 500,000 tons.

Colombia and Ecuador

In Colombia, we have TuboCaribe, a pipe manufacturing facility in Cartagena, on an area of 60 hectares, including a state-of-the-art finishing plant for seamless pipes. The total estimated annual finishing capacity is approximately 250,000 tons, with an estimated annual ERW production capacity of approximately 140,000 tons. This facility produces OCTG and line pipe products with an outside diameter range of 2 ¾ to 9 ⅝ inches, and includes two ERW mills, one heat treatment line, one slotting line and three threading lines, including premium connections capacity. Inspection lines and materials testing laboratories complete the production facility. A 2 to 24 inches diameter multilayer coating facility complements our line pipe production facilities.

In addition, we have a coupling shop with fifty-eight lathes, ten cutting machines, and two phosphatizing lines. Inspection and finishing lines complete this facility. The shop has an estimated annual production capacity of 2.3 million pieces, including API and premium threads.

In Ecuador, we have a threading and finishing facility with an annual capacity of 35,000 tons, and a service center which is designed to support our Rig Direct® strategy, both situated in Machachi.

Europe

In Europe, we have several seamless pipe manufacturing facilities in Italy and one in Romania, and a premium connection threading facility in the United Kingdom.

Italy

Our principal manufacturing facility in Europe is an integrated plant located in the town of Dalmine, in the industrial area of Bergamo, about 40 kilometers from Milan in northern Italy. Situated on an area of 150 hectares, the plant includes a state-of-the-art seamless pipe mill and has an annual production capacity of approximately 650,000 tons of seamless steel pipes and 935,000 tons of steel bars.

The Dalmine facility comprises:

- a steel shop, including an electric arc furnace, two ladle furnaces, two vacuum degassing and two continuous casters with their own cooling beds;
- a retained mandrel mill with two in-line-high-productivity finishing lines including one heat treatment;
- a rotary expander with a finishing line including a heat treatment; *and*
- two premium connection threading lines.

The major operational units at the Dalmine facility and corresponding effective annual production capacity (in thousands of tons per year) as of December 31, 2022, are as follows:

	Effective Annual Production Capacity (thousands of tons) ⁽¹⁾
Steel Shop	935
Pipe Production	
Retained Mandrel Mill Medium Diameter (plus Rotary Expander for Large Diameter)	650

⁽¹⁾ Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

The Dalmine facility manufactures seamless steel pipes with an outside diameter range of 146 to 711 mm (5.70 to 28.00 inches), mainly from carbon, low alloy and high alloy steels for diverse applications. The Dalmine facility also manufactures steel bars for processing at our facilities in Italy and elsewhere. It has an annual production capacity of 650,000 tons.

We also have a production facility, located in Arcore, about 25 kilometers from Milan in northern Italy. The Arcore facility, which covers an area of approximately 26 hectares and comprises a Diescher mill with associated finishing lines. Production is concentrated in heavy-wall mechanical pipes with an outside diameter range of 48 to 219 mm (1.89 to 8.62 inches). The Arcore facility has an annual production capacity of approximately 150,000 tons.

Our production facilities located in Italy have a collective annual production capacity of approximately 800,000 tons of seamless steel pipes.

In addition to the main facility mentioned above, we also have:

- the Costa Volpino facility, which covers an area of approximately 31 hectares and comprises a cold-drawing mill and an auto components facility producing cold-drawn carbon, low alloy and high alloy steel pipes with an outside diameter range of 12 to 380 mm (0.47 to 15 inches), mainly for automotive, mechanical and machinery companies in Europe. The Costa Volpino facility has an annual production capacity of approximately 55,000 tons; *and*
- a facility at Sabbio, which manufactures gas cylinders with an annual production capacity of approximately 14,000 tons or 270,000 pieces, and a large vessels plant inside the Dalmine facility, with a production capacity of around 2,500 finished pieces per year.

In order to reduce the cost of electrical energy at our operations in Dalmine, we constructed a gas-fired, combined heat and power station with a capacity of 120 megawatts in Dalmine. Our operations in Dalmine consume a share of the power generated at the power station, which has sufficient capacity to meet almost the whole electric power requirements of these operations. The additional energy needed to cover consumption peaks and the excess energy produced are purchased and sold to the market while heat is sold for district heating.

Romania

We have a seamless steel pipe manufacturing facility in northwest Romania, located in the city of Zalau, 530 kilometers from Bucharest. The facility includes a hot rolling mill and has an annual production capacity of approximately 250,000 tons of hot rolled pipes and 210,000 tons of finished products, of which 30,000 tons are cold drawn. The plant produces carbon and alloy steel tubes with an outside diameter range of 21.3 to 159 mm (0.839 to 6.26 inches) for hot rolled tubes and 8 to 120 mm (0.315 to 4.724 inches) for cold drawn tubes. We also have a steelmaking facility in southern Romania, located in the city of Calarasi, with an annual steelmaking capacity of 620,000 tons, supplying steel bars for European operations as well as to other rolling mills in our industrial system. The industrial facilities in Romania comprise:

- a steel shop including an electric arc furnace, a ladle furnace and a continuous caster;
- a floating mandrel mill;
- four finishing lines, including heat treatment lines, upsetting machine, line pipe, threading, make-up and inspection equipment facilities;
- a coupling shop;
- an accessories line;
- a cold-drawing plant with finishing area; *and*
- automotive and hydraulic cylinders components' production machinery.

	Effective Annual Production Capacity (thousands of tons) ⁽¹⁾
Steel Shop	620
Seamless Pipe Production	210

⁽¹⁾ Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

United Kingdom

In Aberdeen, we have a premium threading facility that produces Tenaris proprietary connections while supporting the manufacture of tubular accessories. The plant works as a hub to service customers working in the North Sea region. The facility has an annual production capacity of approximately 20,000 pieces, with a production range of 2 ³/₈ to 20 inches.

Middle East and Africa

We have a controlling participation in SSPC, a welded steel pipe producer, which operates five production lines and produces welded pipes for the local oil & gas industry (OCTG and line pipe) and for the industrial and construction sectors. Annual capacity is 360,000 tons covering a diameter range from ½ to 20 inches. We also have a threading facility for the production of premium joints and accessories in Saudi Arabia, with an annual production capacity of 120,000 tons. SSPC holds a 35% interest in GPC, a joint venture company, established in 2010 and located in Jubail, Saudi Arabia, which manufactures LSAW pipes.

Additionally, we have a premium threading facility in Kazakhstan. The state-of-the-art facility has the capacity to produce 45,000 tons of OCTG annually for threading seamless pipes and gas-tight premium connections to serve the local market.

In Nigeria, we have a facility dedicated to the production of premium joints and couplings located in Onne. This plant comprises a threading facility for both API and premium connections with an annual production capacity of approximately 40,000 tons, inspection facilities and a stockyard. In addition, we own a 40% participation in Pipe Coaters, a leading company in the Nigerian pipe coating industry, located in Onne, which supplies a wide variety of products and services for the oil and gas industry, such as internal, anticorrosion, concrete and thermal insulation coatings for onshore and offshore (including deepwater) applications.

Asia Pacific

We own a facility for the production of premium joints and couplings in Qingdao, on the east coast of China. The facility has an annual production capacity of approximately 40,000 tons of premium joints. Additionally, we have a facility that produces components for the local automotive industry.

In December 2020 we entered into an agreement with Baotou Steel to build a steel pipe premium connection threading plant to produce OCTG products in Baotou, China. Under the agreement, Tenaris holds 60% of shares in the joint-venture company, while Baogang Steel Pipes (“Baogang”) owns the remaining 40%. The plant started operations in the first quarter of 2022.

In addition, in Indonesia, we hold 89.17% of SPIJ, an Indonesian OCTG processing business with heat treatment, premium connection threading facilities, coupling shop and a quality-testing laboratory, including an ultrasonic testing machine, which has an annual processing capacity of approximately 120,000 tons. We also have a premium joints accessories threading facility in the state of Batam, which we integrated into our operations following the acquisition of Hydril.

Tenaris’s former seamless pipe manufacturing facility in Japan, located in the Keihin steel complex owned by JFE, was operated by NKK Tubes, a company owned 51% by Tenaris and 49% by JFE. The NKK Tubes facility produced a wide range of carbon, alloy and stainless steel pipes for the local market and high value-added products for export markets with an effective annual production capacity of approximately 260,000 tons. Following JFE’s decision to permanently cease some of its operations in the Keihin complex, where NKK Tubes was located, Tenaris and JFE engaged in discussions and ultimately determined that the project was no longer economically sustainable. Accordingly, the parties agreed to terminate amicably their joint venture and liquidate NKK Tubes, which ceased operations on June 30, 2022. The liquidation process of NKK Tubes started on November 30, 2022 and is expected to be completed in 2023. For further information on the termination of the NKK Tubes joint venture, please refer to note 35 “Other relevant information - *Agreement to terminate NKK Tubes joint venture*” of our audited consolidated financial statements included in this annual report.

Production Facilities – Others

We have facilities for the manufacturing of sucker rods in Villa Mercedes (San Luis, Argentina), Moreira Cesar (São Paulo, Brazil), Veracruz (Mexico), Campina (Romania) and Conroe (Texas, United States). Our total annual manufacturing capacity of sucker rods is approximately 3.1 million units.

In March 2021, Tenaris acquired fracking equipment from U.S.-based oil services company, Baker Hughes, in Argentina, allowing us to step up our services portfolio in the Vaca Muerta shale deposit on an expected rise in activity. In connection with this transaction, we acquired a pressure pumping fleet, a coiled tubing unit and related equipment.

In March, 2022, we reorganized the activities at our Confab Equipamentos industrial facility in Moreira César, Pindamonhangaba, São Paulo, Brazil. Our Brazilian subsidiaries discontinued the manufacturing of industrial equipment to focus their activities entirely on the production of welded products, sucker rods, coatings and accessories.

In Italy, we have the Piombino facility, which covers an area of approximately 67 hectares and comprises a hot-dip galvanizing line and associated finishing facilities. Production is focused on finishing of small diameter seamless pipes for construction and plumbing applications in the domestic market, such as residential water, gas transport and firefighting. The Piombino facility has an annual production capacity of approximately 100,000 tons.

In addition, we have specialized facilities in the Houston area producing coiled tubing and umbilical tubing:

- A coiled tubing facility of approximately 150,000 square feet of manufacturing space on 4 hectares. The plant consists of two mills and coating operations capable of producing coiled tubing products in various grades, sizes and wall thicknesses. A new continuous heat treatment line has been recently installed.
- An umbilical tubing facility of approximately 85,000 square feet of manufacturing space on 6 hectares. The facility is capable of producing stainless or carbon steel tubing in various grades, sizes and wall thickness.

Sales and Marketing

Net Sales

Our total net sales amounted to \$11,763 million in 2022, compared to \$6,521 million in 2021 and \$5,147 million in 2020. For further information on our net sales see “Operating and Financial Review and Prospects – Results of Operations”.

The following table shows our net sales by business segment for the periods indicated therein:

Millions of U.S. dollars

	For the year ended December 31,					
	2022		2021		2020	
Tubes	11,133	95%	5,994	92%	4,844	94%
Others	630	5%	528	8%	303	6%
Total	11,763	100%	6,521	100%	5,147	100%

Tubes

The following table indicates, for our Tubes business segment, net sales by geographic region:

Millions of U.S. dollars	For the year ended December 31,					
	2022		2021		2020	
Tubes						
- North America	6,796	61%	3,240	54%	2,109	44%
- South America	2,213	20%	1,051	18%	660	14%
- Europe	867	8%	622	10%	566	12%
- Middle East & Africa	980	9%	832	14%	1,194	25%
- Asia Pacific	277	2%	249	4%	315	7%
Total Tubes	11,133	100%	5,994	100%	4,844	100%

North America

Sales to customers in North America accounted for 61% of our sales of tubular products and services in 2022, compared to 54% in 2021 and 44% in 2020.

We have significant sales and production facilities in each of the United States, Canada and Mexico, where we provide customers with an integrated product and service offering based on local production capabilities supported by our global industrial system. In the past few years, we have extended our integrated product and service model, which we call Rig Direct[®], throughout North America, and we operate a seamless pipe mill at Bay City, Texas, which is strategically located to serve the Eagle Ford and Permian regions. On January 2, 2020, we acquired IPSCO, a U.S. seamless and welded pipe producer, which has further strengthened our local production capabilities and capacity to provide Rig Direct[®] services in the United States. Under Rig Direct[®], we manage the whole supply chain from the mill to the rig for customers under long-term agreements, integrating mill production with customer drilling programs, reducing overall inventory levels and simplifying operational processes. We first introduced the Rig Direct[®] model to Pemex in Mexico in 1994, and since then we have supplied them with pipes on a just-in-time basis. Today, we supply a large majority of our U.S. and Canadian customers for OCTG products with Rig Direct[®] services.

Sales to our oil and gas customers in the United States and Canada are highly sensitive to oil prices and regional natural gas prices. Over the past fifteen years, the drilling of productive shale gas and tight oil reserves, made possible by new drilling technology, has transformed drilling activity and oil and gas production in the United States and Canada. Following 25 years of declining production, U.S. crude oil production began to increase in 2009 and rose significantly, from 5.6 million b/d in 2011 to 12.3 million b/d in 2019. Due to the COVID-19 pandemic and collapse in oil prices, production in 2020 and 2021 fell back to 11.3 million b/d on average but ended 2022 at 12.2 million b/d. Production of natural gas liquids (“NGLs”) also increased significantly in the past decade in North America. This rapid increase in production, however, contributed to an excess of supply in the global oil market in 2014 and a consequent fall in the price of oil. Further rapid increases in production in 2018 and 2019 led to OPEC member country producers and other producers agreeing to cut production to balance the market and support oil prices. In 2020, however, the impact of the COVID-19 pandemic led to a sudden and substantial reduction in global oil demand in the first half of 2020 and a collapse in oil prices. Global oil demand and prices have now effectively recovered, along with economic activity, as COVID-19 vaccination programs have been rolled out, and OPEC and other producer countries, including Russia, implemented production cuts to lower supply below demand and reduce inventory levels. At the same time, U.S. shale producers have restrained investments in response to the post COVID-19 recovery of oil prices as they face financial market pressures to increase returns to shareholders and limit investments in production growth.

Similarly, natural gas production has risen rapidly over the past decade and the United States became a net exporter of natural gas for the first time in 2017 and has now become a significant exporter of liquefied natural gas (“LNG”) to global markets. In Canada, there has been a similar shift towards drilling of shale gas and tight oil reserves.

The drop in oil prices with the onset of the COVID-19 pandemic in the first half of 2020, resulted in a collapse in U.S. drilling activity, with the number of active rigs falling to the lowest level recorded in over 40 years. However, since then, there has been a steady recovery in U.S. drilling activity through 2021 and 2022 with the number of active rigs plateauing below pre-pandemic levels at the end of 2022. As we enter into 2023, drilling activity is showing a slight decline as North American natural gas prices have declined to low levels due to increasing production and a low level of demand in the winter heating season.

The level of drilling activity in North America, and consequently demand for our products and services, could also be affected by actions taken by the governments of the region to accelerate the energy transition by reducing demand for oil and gas and restricting drilling activity.

During 2020, demand for, and sales of, our OCTG products in the U.S. and Canada collapsed along with drilling activity. As a result we closed down many of our facilities in the U.S. and, we dismantled our Prudential welded pipe mill in Calgary, Canada and we integrated welded pipe production at our seamless pipe mill in Sault Ste. Marie, Ontario. Towards the end of 2020, demand for and sales of OCTG in the U.S. and Canada began a recovery which continued throughout 2021 and 2022. During this recovery period we reopened many of the facilities we had shut down in 2020 and brought production at our Bay City mill to full capacity. A particular feature of this recovery was the exceptional price levels for hot rolled coil in the North American market which made the production of welded pipes uneconomic throughout 2021 and delayed the restart of U.S. welded pipe production into 2022. The ramp up of production capacity in the United States was further affected by difficulties in hiring qualified workforce in the post-COVID economy.

During 2018, the U.S. government introduced Section 232 tariffs and quotas on the imports of steel products, including steel pipes, with the objective of strengthening domestic production capacity utilization and investment. The proportion of the OCTG market supplied by imports initially declined from around 60% prior to the imposition of tariffs and quotas to around 40% at the end of 2018 but OCTG imports subsequently rose to around 50% in the last two years.

On October 27, 2021, the DOC initiated antidumping duty investigations on OCTG imports from Argentina, Mexico, and Russia and countervailing duty investigations of OCTG from Russia and South Korea. On October 26, 2022, the ITC issued a final determination that the imports under investigation caused injury to the U.S. OCTG industry. As a result of the investigation, Tenaris is required to pay antidumping duties (at a rate of 78.30% for imports from Argentina and 44.93% for imports from Mexico) on its imports of OCTG from Argentina and Mexico for five years. Tenaris has been paying antidumping duty deposits since May 11, 2022, reflecting the amount of such deposits in its production costs. The deposit rates will be reset periodically based on the results of the administrative review process. Tenaris has appealed the duty ruling in respect of imports from Mexico and Argentina. This ruling could limit our sales in the country.

Our sales in the United States are also affected by the level of investment of oil and gas companies in exploration and production in offshore projects. The blow-out at the Macondo well in the Gulf of Mexico and the subsequent spillage of substantial quantities of oil resulted in a moratorium that halted drilling activity. The drilling moratorium was lifted in October 2010, when new regulations affecting offshore exploration and development activities were announced. Since then, drilling activity recovered but, in addition to oil price movements, could be affected by actions taken by the government to restrict drilling activity on Federal lands, which include the Gulf of Mexico.

Oil and gas drilling in Canada is subject to strong seasonality, with the peak drilling season in Western Canada being during the winter months when the ground is frozen. During the spring, as the ice melts, drilling activity is severely restricted by the difficulty of moving equipment in muddy terrain.

On June 30, 2021, Canada initiated an antidumping investigation on OCTG from Mexico. A full investigation was conducted and on January 26, 2022, the Canadian International Trade Tribunal found that Mexican imports were not injuring the Canadian OCTG industry, and closed the inquiry without imposing any duties.

In Mexico, we have enjoyed a long and mutually beneficial relationship with Pemex, the Mexican state-owned oil company, and one of the world's largest crude oil and condensates producers. In 1994, we began supplying Pemex with Rig Direct® services. At the end of 2022, we renewed our long-term agreement with Pemex for an additional three-year period.

At the end of 2013, Mexico reformed its constitution to allow increased private and foreign investment in the energy industry. Pursuant to these reforms, foreign and private investors are allowed to participate in profit and production sharing contracts and licenses, and Pemex has been transformed into a state-owned production company, but ceased having a monopoly on production. In addition, a regulatory framework was developed and contracts with foreign and private investors were awarded. More recently, the government has taken steps to strengthen the role and primacy of Pemex in oil and gas production in the country as well as that of the state-owned CFE in the provision of electric energy and unsuccessfully attempted to introduce a constitutional reform proposal of the electricity sector, seeking to reverse the legal framework derived from the 2013 constitutional energy reform that opened the sector to private investment. For more information on the proposed reform to the energy market in Mexico, see “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”.

Drilling activity in Mexico and demand for our OCTG products dropped only slightly in 2020 as the country was protected from lower oil prices by a price hedging program. Over the past two years, drilling activity in Mexico has increased moderately as the Mexican government and Pemex implemented measures to reverse production decline while investments pursuant to the energy reform process have been implemented cautiously.

South America

Sales to customers in South America accounted for 20% of our sales of tubular products and services in 2022, compared to 18% in 2021 and 14% in 2020.

Our largest market in South America is Argentina. We also have significant sales in Brazil and Colombia. We have manufacturing subsidiaries in each of these countries.

Our sales in South America are sensitive to the international price of oil and its impact on the drilling activity of participants in the oil and gas sectors, as well as to general economic conditions in these countries. In addition, sales in Argentina, as well as export sales from our manufacturing facilities in Argentina, are affected by governmental actions and policies, such as the taxation of oil and gas exports, measures affecting gas prices in the domestic market and other matters affecting the investment climate. Sales in Brazil are also affected by governmental actions and policies and their consequences, such as measures relating to the taxation and ownership of oil and gas production activities and the operations of Petrobras. For more information, please see “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”.

A principal component of our marketing strategy in South American markets is the establishment of long-term supply agreements and Rig Direct® services with national and international oil and gas companies operating in those markets.

In Argentina, we have a significant share of the market for OCTG products. We have longstanding business relationships with YPF S.A. (“YPF”), the Argentine state-controlled company, and with other operators in the oil and gas sector. We strengthened our relationship with YPF in 2013 through a long-term agreement, which was renewed for an additional five-year term at the beginning of 2022, under which we provide Rig Direct® services with the objective of reducing YPF’s operational costs as it aims to increase production through investments in Argentina’s shale oil and gas reserves. Drilling activity fell significantly during 2019 after the electoral process in Argentina. In 2020, our sales were affected by ongoing uncertainties regarding the energy policies that would be adopted by the incoming government as well as the onset of the COVID-19 pandemic. Activity recovered during 2021 and 2022. The principal restraint on further increases in activity, particularly in the Vaca Muerta shale play, is the lack of pipeline capacity for exporting oil and for transporting gas to the main consumption centers in Buenos Aires. New pipeline infrastructure is being installed; construction of the first phase of a new gas pipeline and two oil export pipelines started in 2022 and further pipeline infrastructure is expected for the next two to three years. We have reactivated our welded pipe mill in Valentin Alsina, province of Buenos Aires, to supply pipes for these pipelines under construction and are supplementing deliveries with welded pipes from our mill in Brazil.

In Brazil, we have a longstanding business relationship with Petrobras. We supply Petrobras with casing (including premium connections) and line pipe products, many of which are produced in our Brazilian welded pipe facility, for both offshore and onshore applications. More recently, we have increased the sale of imported seamless products to Petrobras for offshore use, including the supply of seamless casing with premium connections, accessories and Rig Direct® services for use in the pre-salt area and seamless line pipe for use in offshore risers. With the development of Brazil’s deepwater pre-salt complex, our mix of products sold in Brazil has evolved from one including mainly line pipe for onshore pipeline projects to one which includes large diameter conductor and surface casing, intermediate and production casing and line pipe for use in deepwater applications. In 2020, with the onset of the COVID-19 pandemic and the collapse in oil prices, Petrobras reduced its onshore drilling operations to focus on pre-salt offshore developments. In 2022, offshore drilling activity began to increase as a result of the development of the Buzios and other pre-salt fields by Petrobras as well as other investments by major oil companies. Consumption of OCTG products in Brazil has remained at a relatively low level over the past five years, as Petrobras reduced its investments in response to budgetary constraints, concentrating on developing its most productive reserves in the pre-salt fields, but OCTG consumption is expected to pick up in 2023. Demand for line pipe for pipeline projects also declined to very low levels with only one major project implemented in the past seven years, but line pipe demand is also expected to pick up in the next years. In response to market-opening measures and the attractiveness of the deepwater reserves, major oil companies are increasing their investments in Brazil, while Petrobras is focusing investments in world class assets in deepwater.

In Colombia, we have established a leading position in the market for OCTG products since 2006, following our acquisition of TuboCaribe, a welded pipe manufacturing facility located in Cartagena. Although the market was deeply affected by low oil prices between 2014 and 2016, it has grown over the past decade as the country encouraged investment in its hydrocarbon industry and opened its national oil company to private investment. In 2020, the pandemic-related collapse in oil prices resulted in a drop of drilling activity which recovered in 2021 and 2022. Recently, however, drilling activity is being affected as the new government has introduced policies aimed at reducing exploration activity while local protests and security concerns are increasing at some drilling locations. Our principal customer in Colombia is Ecopetrol S.A. (“Ecopetrol”), to which we supply Rig Direct® services. In 2022 we renewed our agreement with Ecopetrol for two years.

In Guyana and neighboring Suriname, offshore drilling activity has been increasing rapidly over the past three years following the discovery of large, cost competitive oil reserves. We are supplying casing for many of the exploration wells and, at the end of 2021, we were awarded a 10-year contract to supply large and medium diameter casing with Rig Direct®-like services to the deepwater offshore development projects in the Starbroek block.

We also have sales in Ecuador, supplying Petroamazonas Ecuador S.A., which merged with EP PetroEcuador, the national oil company, as well as private operators. To increase local content, we have established a local OCTG threading facility in Machachi.

We were present in the Venezuelan OCTG market for many years and we maintained business relationships with Petr leos de Venezuela S.A. and the joint venture operators in the oil and gas sector until the imposition of economic sanctions by the Office of Foreign Assets Control (“OFAC”). Additionally, we maintained business relationships with Chevron in Venezuela until April 22, 2020, when their sanctions license expired. Our sales in Venezuela declined to low levels in 2020, with no sales in 2021 and 2022. Recently, Chevron has been authorized to resume certain operations, which could lead to a resumption of sales in Venezuela in the future.

Europe

Sales to customers in Europe accounted for 8% of our sales of tubular products and services in 2022, compared to 10% in 2021 and 12% in 2020.

Our single largest country market in Europe is Italy. The market for steel pipes in Italy (as in much of the European Union) is affected by general industrial production trends, especially in the mechanical and automotive industry, and by investment in power generation, petrochemical and oil refining facilities. Sales to the mechanical and automotive industries and for HPI and power generation projects in Italy and the rest of Europe in 2020 were affected by lower prices reflecting increased competitive pressures, but volumes were relatively stable. In 2021, activity and our sales increased, while in 2022, although activity was affected by the Russian invasion, our sales increased as prices rose to compensate higher costs.

In Europe we also have significant sales to the oil and gas sector, particularly in the North Sea. Demand from this market is affected by oil and gas prices in the international markets and their consequent impact on oil and gas drilling activities in the North Sea and other areas, like Romania. In addition, we ceased sales to Russia that would breach applicable sanctions imposed by the U.S. and the EU following the Russian invasion of Ukraine.

Europe is also a region which we expect will be at the forefront of developments in low-carbon energy, including hydrogen storage and transportation, carbon capture and sequestration and waste-to-energy power generation. We are participating in these market segments where we expect to see growth in sales in the coming years.

Middle East and Africa

Sales to customers in the Middle East and Africa accounted for 9% of our sales of tubular products and services in 2022, compared to 14% in 2021 and 25% in 2020.

Our sales in the region remain sensitive to international prices of oil and gas and their impact on drilling activities as well as to the production policies pursued by OPEC, and, more recently, OPEC+ countries, many of whose members are located in this region. In the past few years, oil and gas producing countries in the Middle East, led by Saudi Arabia, have increased investments to develop gas reserves to fuel regional gas-based industrial development, which have positively affected their consumption of premium OCTG products. Saudi Arabia, in particular, has shown strong growth in sour and high pressure gas field drilling activity. More recently, the main national oil companies in the Gulf have also begun to increase investments to add oil and LNG production capacity as they seek to accelerate the monetization of their oil and gas reserves. Additionally, in the eastern Mediterranean, vast reserves of natural gas have been discovered, some of which have been targeted for fast track development.

In Africa, international oil companies increased investments in exploration and production in offshore projects in 2012 and 2013 but began to postpone or reduce their investment commitments in 2014 due to the high cost of offshore project developments and a lower success rate in exploration activity. Since 2015, following the oil price collapse, exploration activity was cut back and major project commitments were postponed. The effect on demand was compounded by the high inventory levels held in the region. In 2022, this situation began to change with an increase in exploration and drilling activity and normalization of OCTG inventory levels.

In the Caspian region, major oil companies operating in Kazakhstan and Azerbaijan increased their investments and drilling activity following the recovery of oil prices in 2017 and we opened a premium threading facility in Kazakhstan in 2019. In 2020 and 2021, however, our sales were affected by the impact of the COVID-19 pandemic on the operations of our customers and the impact on drilling activity of adherence to the production cuts agreed by the OPEC+ countries in response to the collapse of oil demand due to the pandemic. Since then, drilling activity and our sales have remained at low levels.

In the past few years, uprisings affected drilling activity in countries such as Syria, Libya and Yemen and, in the case of Libya, the oil and gas industry was effectively shut down in 2011. In addition, in the past years, U.S. and E.U. sanctions have affected production and exports in Iran.

Our sales in the Middle East and Africa could be adversely affected by political and other events in the region, such as armed conflicts, terrorist attacks and social unrest, which could materially impact the operations of companies active in the region's oil and gas industry. Our sales in the region can also be affected by the levels of inventories held by the principal national oil companies and their effect on purchasing requirements. For more information, please see "Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition".

In 2019 and 2020, sales in the Middle East rose while sales in Africa (including the East Mediterranean) were affected by the slowdown in drilling activity and investments in deepwater projects. Sales in the region declined in 2021 as a result of various factors, including the slowdown in investments in drilling activity pursuant to the pandemic and reduction in oil demand and prices and ongoing inventory reductions at some of the region's largest consumers like Saudi Arabia and the United Arab Emirates. In 2022, our sales in the region began to recover and we expect this recovery will strengthen during 2023.

In January 2019, we acquired 47.8% of SSPC, a listed welded steel pipe producer in Saudi Arabia. SSPC produces OCTG, line pipe and commercial pipe products mainly for the local market and it is qualified to supply Saudi Aramco for certain products. Through this investment, Tenaris has increased its local industrial presence in an important oil and gas market where policies are being implemented to diversify the economy and increase local manufacturing. Saudi Arabia continues to reinforce measures in favor of local content particularly for suppliers to state-owned companies like Saudi Aramco. In 2022, we entered into a long-term agreement with Saudi Aramco for the supply of seamless OCTG products that prioritizes local production where possible.

In addition, Tenaris currently owns, through its subsidiary SSPC, a 35% share interest in GPC, a Saudi-German joint venture, established in 2010 and located in Jubail, Saudi Arabia, which manufactures LSAW pipes.

In August 2019 we were awarded a long-term agreement with Rig Direct® conditions, valued at \$1.9 billion, to supply approximately half of the OCTG requirements of Abu Dhabi National Oil Company ("ADNOC") in Abu Dhabi over the next five to seven years. In order to serve this market, we have expanded our local service base and are constructing a new premium OCTG threading facility. We have also been awarded significant contracts to supply Qatargas Liquefied Gas Company Limited ("QatarGas") and Kuwait Oil Company ("KOC") over the coming years.

Asia Pacific

Sales to customers in the Asia Pacific accounted for 2% of our sales of tubular products and services in 2022, compared to 4% in 2021 and 7% in 2020.

We have a presence in the region with local production facilities in Indonesia, China and a service center in Australia.

Sales to Indonesia and other markets in South East Asia and Oceania are mainly affected by the level of oil and gas drilling activity, particularly offshore drilling activity. Low oil prices have deeply affected drilling activity and our sales throughout the region. In addition, the long-term agreement to provide pipes with Rig Direct® services in Thailand was terminated in 2020, anticipating changes in the ownership of oil and gas development concessions.

Our sales in China are concentrated on premium OCTG products used in oil and gas drilling activities. Over the past years, China has significantly reduced its imports of OCTG products as local producers compete ferociously in an oversupplied market. We continue, however, to seek new markets in niche applications and in 2016 we opened a components facility for processing pipes for use in airbags for automobiles, which we are currently expanding for the second time. In 2020, we established a joint venture with Baotou Steel, a major domestic supplier of seamless pipes to the onshore oil and gas fields, for the construction of a premium threading facility located within our partner's steelmaking facilities in Inner Mongolia. The new facility, which finishes pipes produced mainly by our joint venture partner, began production during the first quarter of 2022. Our participation in the joint venture is 60%. During 2022, Baotou Steel and Baosteel International Group ("Baosteel") merged their seamless pipe business into a new company named Baogang. Baogang now holds 40% of the shares in the joint venture with Tenaris, and has recently confirmed its intention to continue with the joint venture.

In Japan, our subsidiary, NKK Tubes, competed against other domestic producers. In November 2022 we entered into a definitive wrap-up agreement with JFE to terminate our joint venture and cease NKK Tubes' operations. The market for steel pipe products in Japan is mostly industrial and depends on general factors affecting domestic investment, including production activity. With the closure of NKK Tubes in June 2022, we have largely ceased to serve this market and accordingly, our sales in the Asia Pacific region now represent a very low proportion of sales in our Tubes segment. Thus, starting on January 1, 2023, we will report our sales in this region together with sales in the Middle East and Africa.

Others

Our other products and services currently include sucker rods used in oil extraction activities, oil and gas services, including fracking and coiled tubing services in Argentina, sales of pipe for plumbing applications from our Italian Piombino mill, coiled tubes used in oil and gas extraction activities, and sales of raw materials and energy that exceed our internal requirements. Net sales of other products and services amounted to 5% of total net sales in 2022, compared to 8% in 2021 and 6% in 2020.

During 2022, we closed down our Brazilian industrial equipment business and, in 2021, we sold our Geneva mill (pipes for construction activities) in the United States as well as a small Saudi equipment manufacturing and erection business that we acquired during our SSPC acquisition.

Competition

The global market for steel pipe products is highly competitive. Seamless steel pipe products, which are used extensively in the energy industry particularly for offshore, high pressure, high stress, corrosive and other complex applications, are produced in specialized mills using round steel billets and specially produced ingots. Welded steel pipe products are produced in mills which process steel coils and plates into steel pipes. Steel companies that manufacture steel coils and other steel products but do not operate specialized seamless steel mills are generally not competitors in the market for seamless steel pipe products, although they often produce welded steel pipes or sell steel coils and plates used to produce welded steel pipes.

The production of steel pipe products following the stringent requirements of major oil and gas companies operating in offshore and other complex operations requires the development of specific skills and significant investments in manufacturing facilities. By contrast, steel pipe products for standard applications can be produced in most seamless pipe mills worldwide and sometimes compete with welded pipe products for such applications including OCTG applications. Welded pipe, however, is not generally considered a satisfactory substitute for seamless steel pipe in high-pressure or high-stress applications.

Over the past two decades, substantial investments have been made, especially in China but also in other regions around the world, to increase production capacity of seamless steel pipe products. Production capacity for more specialized product grades has also increased. With the downturn between 2014 and 2016 in the price of oil and demand for tubes for oil and gas drilling, the overcapacity in steel pipe and seamless steel pipe production worldwide became acute, extending beyond commodity grades. This situation has been accentuated by the more recent COVID-19 induced collapse in demand and the prospect of an accelerated energy transition. Effective competitive differentiation and industry capacity closures will be key factors for Tenaris.

Our principal competitors in steel pipe markets worldwide are described below.

- Vallourec S.A. (“Vallourec”), a French company, has mills in Brazil, China, Germany and the United States. Vallourec has a strong presence in the European market for seamless pipes for industrial use and a significant market share in the international market with customers primarily in Europe, the United States, Brazil, China, the Middle East and Africa. Vallourec is an important competitor in the international OCTG market, particularly for high-value premium joint products, where it operates a technology partnership for VAM[®] premium connections with Nippon Steel Corporation (“NSC”). Prior to the collapse in oil prices in 2014 to 2016, Vallourec increased its production capacity by building mills in Brazil (jointly with NSC) and Youngstown, Ohio, acquiring three tubular businesses in the United States and Saudi Arabia, and concluding an agreement with a Chinese seamless steel producer, Tianda Oil Pipe Company (“Tianda”) to distribute products from Tianda in markets outside China. In early 2016, in response to accumulating losses, Vallourec announced a \$1 billion capital increase, more than half of which was provided by a French government fund and NSC, who each agreed to increase their equity participation to 15%. At the same time, an industrial restructuring program was announced under which Vallourec reduced capacity in Europe, closing its rolling mills in France, combined its operations in Brazil with that of the new mill held with NSC, acquired a majority position in Tianda and bought out the remaining minority interest, and strengthened its cooperation with NSC for the development and testing of premium connection products and technology. Despite this restructuring program, Vallourec’s losses continued and its equity position turned negative. In June 2021, Vallourec completed a further financial restructuring, in which its former shareholders, including NSC and Bpifrance (“BPI”), a French state-owned investment company, were severely diluted and its creditors, including private equity investors, assumed effective control. Under this restructuring, NSC exited its investment in the Brazilian mill and had its position in Vallourec diluted to around 3%. Subsequently, NSC also sold its equity interests in Vallourec’s U.S. operations. In 2022, Vallourec confirmed that it would close its German mills during 2023 and would invest EUR100 million in its Brazilian mills to enable the transfer of its specialized products for oil and gas customers from Germany to Brazil.

- Japanese players NSC and, to a lesser extent, JFE together enjoy a significant share of the international market, having established strong positions in markets in the Far East and the Middle East. They are internationally recognized for their supply of high-alloy grade pipe products. In recent years, NSC increased its capacity to serve international markets through the construction with Vallourec of a new seamless pipe mill in Brazil, and further strengthened its ties with Vallourec through participating in Vallourec's 2016 capital increase and combining their respective Brazilian operations. As part of the latest financial restructuring of Vallourec, NSC relinquished its participation in the Brazilian operation and ceded its reference shareholder position in Vallourec. In 2022, NSC, as part of a general restructuring of its steelmaking operations, closed one of its three seamless pipe production mills and announced that it would close its large diameter welded pipe mill and exit the large diameter welded line pipe market.
- In recent years, TMK, a Russian company, led the consolidation of the Russian steel pipe industry, invested to modernize and expand its production capacity in Russia and expanded internationally through acquisitions into Eastern Europe and the United States. TMK also expanded in the Middle East through the acquisition of a controlling interest in Gulf International Pipe Industry LLC ("Gulf International Pipe"), a welded pipe producer in Oman. More recently, however, TMK adopted a strategy of monetizing its international assets by reducing its participation in Gulf International Pipe and selling IPSCO to Tenaris, as well as strengthening its position in its domestic market by acquiring Chelpipe, the second Russian producer of seamless pipes in 2021. In 2022, following the Russian invasion of Ukraine, the American Petroleum Institute ("API") withdrew its license for products produced in TMK's mills in Russia. Russian producers or their controlling shareholders are now subject to U.S., EU and UK sanctions, among others, and are now largely prevented from competing in several markets.
- Over the past two decades, Chinese producers increased production capacity substantially and strongly increased their exports of steel pipe products around the world. Due to unfair trading practices, many countries, including the United States, the European Union, Canada, Mexico and Colombia, have imposed anti-dumping restrictions on Chinese imports to those regions. In 2009, the largest Chinese producer of seamless steel pipes, Tianjin Pipe (Group) Corporation Limited ("TPCO"), announced a plan to build a new seamless pipe facility in the United States in Corpus Christi, Texas; heat treatment and pipe finishing facilities have been constructed but steelmaking and hot rolling facilities have not been completed. As part of a financial restructuring, a 51% shareholding in TPCO was sold to Shanghai Electric Group and has now been sold on to Citic Group Corporation Ltd. ("Citic"), a state-owned conglomerate. Although producers from China compete primarily in the "commodity" sector of the market, several of these producers, including Baosteel and TPCO, have developed and are selling more sophisticated products, particularly in the domestic market.
- The tubes and pipes business in the United States and Canada has experienced significant consolidation over the years, while new players have also emerged. In recent years, Tenaris constructed a greenfield seamless pipe mill at Bay City, Texas and acquired IPSCO from TMK in January 2020, becoming the leading seamless pipe producer in the United States, while U.S. Steel integrated its seamless pipe business by building an EAF steel shop in Fairfield, Alabama, which started up in late 2020. At the same time, many new players have built, or announced plans to build, pipe mills in the United States. These include, in addition to TPCO, Boomerang LLC, a company formed by a former Maverick executive that opened a welded pipe mill in Liberty, Texas, in 2010, now known as PTC Liberty Tubulars and part of the PTC Alliance; Benteler, a European seamless pipe producer that built a new seamless pipe mill in Louisiana, which opened in September 2015; and a plethora of welded pipe mills established by subsidiaries of foreign pipe producers, such as SeAH Steel ("SeAH"), of Korea and JSW Group ("JSW"), of India. North American pipe producers are largely focused on supplying the U.S. and Canadian markets, where they have their production facilities. In Canada, Tenaris closed its Prudential welded pipe mill in Calgary in 2020 and integrated a welded pipe production line at its seamless pipe mill in Sault Ste. Marie, Ontario in 2022.
- Korean welded pipe producers, who have a limited domestic market, have targeted the U.S. market for standard applications. They have gained a significant market position, despite the application of anti-dumping duties for unfair trading practices and being subject to Section 232 quotas. One of them, SeAH, has acquired and built local welded pipe production facilities in the United States.
- Tubos Reunidos S.A. ("Tubos Reunidos") of Spain, Benteler of Germany and Voest Alpine A.G. ("Voest Alpine") of Austria each have a significant presence in the European market for seamless steel pipes for industrial applications. Voest Alpine also has a relevant presence in the U.S. and Canadian OCTG markets and some other international OCTG markets. In 2016, Tubos Reunidos opened an OCTG threading facility targeting international markets. In 2006, ArcelorMittal S.A. ("ArcelorMittal") created a tubes division through several acquisitions and has mills in North America, Eastern Europe, Venezuela, Algeria and South Africa and has built a seamless pipe mill in Saudi Arabia.

- In the Middle East, particularly in Saudi Arabia, which has implemented policies to encourage local production for its oil and gas industry, several pipe mills were established, including a seamless pipe mill built by Jubail Energy Services Company (“JESCO”), a company established with majority participation from a state-backed industrial development company, and a seamless pipe mill originally built by a joint venture of ArcelorMittal and local shareholders (“AMTJ”). These local players have been strengthening their capabilities and are taking an increasing share of the pipes supplied to Saudi Aramco as well as exporting to other countries in the Middle East and the rest of the world. In January 2019, Tenaris acquired a controlling 47.79% participation in SSPC, a local welded pipe producer. In 2021, JESCO and AMTJ, who were both operating with losses, combined their operations at the behest of the Saudi Public Investment Fund.

Producers of steel pipe products can maintain strong competitive positions in markets where they have their pipe manufacturing facilities due to logistical and other advantages that permit them to offer value-added services and maintain strong relationships with domestic customers, particularly in the oil and gas sectors. Our subsidiaries have established strong ties with major consumers of steel pipe products in their home markets, reinforced by Rig Direct[®] services, as discussed above.

Capital Expenditure Program

During 2022, our capital expenditures, including investments at our plants and information systems (“IT”), amounted to \$378 million, compared to \$240 million in 2021 and \$193 million in 2020. Of all capital expenditures made during 2022, \$346 million were invested in tangible assets, compared to \$214 million in 2021 and \$168 million in 2020.

In 2022, we increased investments in alternative energies and focused on consolidating our position in North America, enhancing efficiency to achieve full capacity in all our Industrial plants and increasing product differentiation.

The major highlights of our capital spending program during 2022 included:

- efficiency improvements focused on steel making, heat treatment and hot rolling processes fostering the integrations in our North American plants, consolidating Tenaris’s position;
- productivity improvement and revamping on existing welded lines in Brazil and Argentina to strengthen our competitiveness in pipes of large outside diameter and local market;
- increasing product and service differentiation, reinforcing our production capabilities for our Dopeless connection products, the increase of capacity on special steel pipes and on automotive components (Qingdao in China and Tamsa in Mexico), and the acquisition of new equipment for fracturing services;
- the revamping and upgrade of our existing lines to improve the standards of industrial efficiency and safety, including the increase of capacity in the coupling mills (Tamsa in Mexico, Siderca in Argentina and Tubos del Caribe in Colombia), and our HSE continuous improvement program (including the ongoing overhead cranes replacement);
- the ongoing construction of a wind farm in Argentina and initial actions in other countries to achieve the target of reducing carbon emissions intensity by 30% by 2030 compared to a 2018 baseline; *and*
- offices redesign project aligning our workspace to the new way of working.

Investments in information systems and other intangible assets totaled \$32 million in 2022, compared to \$26 million in 2021 and \$26 million in 2020.

The focus of our IT capital-spending program has been set on four drivers:

- digital integration/services to customers and logistics, synergizing with current favorable market conditions;
- update and standardization of our manufacturing systems, especially in our North American multi-plant industrial system;
- risk mitigation, operational continuity and cybersecurity; *and*
- process simplification and efficiency.

We continue carrying out our multi-year programs: the Integrated Scheduling System in Tamsa, Dalmine and Silcotub, industrial cybersecurity and infrastructure, and the Industrial Cost System. These investments will enable Tenaris to be faster and more flexible in the current market context and to sustain its industrial excellence.

Capital expenditures are expected to increase to around \$650 million in 2023, mainly due to projects that are expected to contribute to our 2030 target for reducing the carbon emission intensity of our operations. In addition to our ongoing investment in a wind farm in Argentina, we will make investments that are expected to improve energy efficiency in Italy, Romania and Argentina, among others.

Additionally, the investment program for 2023 includes:

- the increase of productivity, safety and CO₂ reduction in several Tenaris facilities, in particular the replacement of Siderca's electric arc furnace number 4 by a Consteel® electromagnetic stirring furnace;
- the revamping of the current exhaust fumes system in the Koppel Steel Shop in the United States;
- the replacement of the austenitizing furnace (Nassheuer furnace) in Dalmine, Italy with a new gas furnace, aiming at increasing heat treatment capacity, productivity and product feasibility range, and reducing transformation costs and CO₂ emissions;
- the construction of new threading facilities, including a swaging line and offices in Abu Dhabi;
- the completion of the Dopeless® migration to the 3.x plan; *and*
- the offices redesign project aligning our workspace to the new way of working (after finishing the pilot projects, the first stage of the program covers the renovation of 12 offices used by more than 650 people in Mexico, the U.S., Argentina, the UK, Canada and Abu Dhabi).

Raw Materials and Energy

The majority of our seamless steel pipe products are manufactured in integrated steelmaking operations using the electric arc furnace route, with the principal raw materials being steel scrap, DRI, HBI, pig iron and ferroalloys. In Argentina we produce our own DRI from iron ore using natural gas as a reductant. Our integrated steelmaking operations consume significant quantities of electric energy, purchased from the local market, and in part produced by our thermo-electric power generating plant. Our welded steel pipe products are processed from purchased steel coils and plates.

The weight of the different steelmaking raw materials and steel vary with the proportion of seamless and welded pipes in the total production mix and among the different production facilities in our industrial system, as well as the specifications of the final products and other factors. On average, in 2022, steel scrap, pig iron, HBI and DRI represented approximately 30% of our steel pipe products' costs, while purchased steel in the form of billets or coils represented approximately 14%, with direct energy accounting for approximately 6%.

The above raw material inputs are subject to price volatility caused by supply, political and economic situations, financial variables and other unpredictable factors. For further information on price volatility, see "Key Information – Risk Factors – Risks Relating to Our Business and Industry – Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy, and price mismatches between raw materials and our products may hurt our profitability". The costs of steelmaking raw materials and of steel coils and plates, increased on average in 2021 compared to 2020 and were subject to high levels of volatility during 2022 as they were affected by the Russian-Ukraine armed conflict and the sanctions being imposed on Russian individuals, companies and institutions. For more information see "Key Information – Risk Factors – Risks Relating to Our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations".

Steel scrap, pig iron and HBI

Steel scrap, pig iron and HBI for our steelmaking operations are sourced from local, regional and international suppliers. In Argentina we produce our own DRI and source ferrous scrap domestically through a wholly owned scrap collecting and processing subsidiary. In Italy we purchase pig iron and ferrous scrap from local and regional markets. In Mexico we import our pig iron and HBI requirements and purchase scrap from domestic and international markets. In Romania we source ferrous scrap mainly from the domestic market and we import pig iron. In the United States, we source scrap from the local market to supply our steelmaking facility, and also source pig iron from international markets.

International prices for steel scrap, pig iron and HBI can vary substantially in accordance with supply and demand conditions.

Annual scrap prices decreased slightly in 2022, but remained at very high levels compared to historical averages. As a reference, prices for Scrap Shredded U.S. East Coast, published by Platts, averaged \$429 per ton in 2022 and \$441 per ton in 2021, while it averaged \$260 per ton in 2020. Scrap prices spiked as a consequence of the Russian invasion of Ukraine due to the relevance of both countries as exporters of semi-finished steel and pig iron. In 2022, Brazil became the largest pig iron supplier to the United States as supply from Russia and Ukraine decreased significantly. As the global economy growth began to decelerate, prices decreased during the second half of 2022.

Iron ore

We consume iron ore in the form of pellets for production of DRI in Argentina. Siderca's consumption of iron ore during 2022 was approximately 972 thousand tons, supplied by Vale International S.A. and Samarco Mineração S.A. from Brazil, and Iron Ore Company ("IOC") from Canada. Annual iron ore prices dropped during 2022 in comparison to 2021, but remained at very high levels compared to historical averages. As a reference, prices for IODEX 62% Fe Index, published by Platts, averaged \$120 per ton in 2022 and \$160 per ton in 2021, in comparison to \$108 in 2020. In January 2022, 62% Fe Iron ore prices, published by Platts, averaged \$131 per ton. Supported by a recovery in global steel production, prices reached an average of \$151 per ton in March 2022. However, due to a contraction in China's steel production during the second half of the year and a decline in global steel demand, prices fell to values below \$100 per ton. Since November 2022, prices of iron ore have recovered on expectations of a rebound in steel production and demand in 2023, returning to levels of around \$123 per ton. The DRI pellet market started with a supply squeeze in 2022 as Ukrainian exports were affected by the conflict and India imposed heavy export tariffs. Since mid-year, the market suffered from weak demand mainly by European and Asian purchasers. Pellet premiums averaged \$72 per ton in 2022, around 20% above 2021 levels. Prices are expected to decrease in 2023 as India has now removed the export tariffs, and demand from Europe could remain weak at least until the second quarter of 2023.

Round steel bars

We mainly satisfy our steel bars and ingots requirements with materials produced in our steelmaking facilities in Argentina, Italy, Mexico, Romania and the United States. We complement this internal supply with purchases of steel bars and ingots from third parties as required, and particularly for use in our seamless steel pipe facilities in Canada and the United States and to supplement production from our steel shop in Mexico.

In Canada, we mainly source our steel bars requirements from our integrated facilities in Argentina, Italy, Mexico, Romania and United States.

In Mexico, we source additional steel bars from Ternium's Mexican facilities under a one-year agreement ending in April 2023, renewable for an additional year. Currently, the Company is assessing alternatives for sourcing these materials, including a renegotiation of the contract with Ternium.

In the United States, following the acquisition of IPSCO in 2020, we own a steel shop facility in Koppel, Pennsylvania. After having completed certain investments in 2021, this facility provides part of the steel bars required by our Bay City and Ambridge mills. We also use steel bars produced in our integrated facilities in Romania, Italy and Mexico. These imports have been granted an exclusion from Section 232 tariffs, and we have recently received a one year exclusion for the import of steel bars from Argentina. Additionally, we have a contract in place with Nucor Steel to purchase a portion of the steel bar requirements in our Bay City mill.

In Japan, following the termination of our joint venture and the closure of the NKK Tubes plant, JFE agreed to provide us with 13 Chrome alloy products for two years, while we advance with the investments required to produce such materials in the rest of our industrial system. For further information on the termination of the NKK Tubes joint venture, please refer to note 35 "Other relevant information - Agreement to terminate NKK Tubes joint venture" of our audited consolidated financial statements included in this annual report.

Steel coils and plates

For the production of welded steel pipe products, we purchase steel coils and steel plates principally from domestic producers for processing into welded steel pipes. We have welded pipe operations in Argentina, Brazil, Canada, Colombia, Saudi Arabia and the United States.

After reaching all-time highs in 2021, the steel coil market prices in 2022 decreased 35%. As a reference, prices for hot rolled coils, HRC Midwest USA Mill, published by CRU, averaged \$1,128 per metric ton in 2022 and \$1,734 per metric ton in 2021.

For our welded pipe operations in the United States, a significant part of our requirements for steel coils are supplied by Nucor Steel which is our principal supplier in the United States. Nucor Steel has a steel coil manufacturing facility in Hickman, Arkansas, near to our principal welded pipe facility in the United States. To secure a supply of steel coils for our U.S. facilities, during 2022 we renewed a long-term purchase agreement with Nucor Steel which is due to expire at the end of 2024. During 2022, we also diversified the sourcing of these materials to include Ternium and Big River Steel.

In Canada, we have restarted negotiations with the main local suppliers to reach long-term agreements for our welded pipe operations. Among such suppliers are ArcelorMittal Dofasco, which has steel coil manufacturing facilities in Hamilton, Ontario, and Algoma Steel, which has steel coil manufacturing facilities in Sault Ste. Marie, Ontario.

We also purchase steel coils and plates for our welded pipe operations in South America (Colombia, Brazil and Argentina) principally from Usiminas, Gerdau S.A. and ArcelorMittal Tubarão in Brazil, from Ternium Argentina S.A. (“Ternium Argentina”), a subsidiary of Ternium in Argentina, and from Ternium’s facilities in Mexico. In addition, in Brazil we also source plates and coils from international suppliers when not produced domestically. In Saudi Arabia, we mainly purchase steel coils and plates from the local market.

Energy

We consume substantial quantities of electric energy, mainly at our electric steel shops in Argentina, Italy, Mexico, Romania and the United States.

In Argentina, our local electric energy requirements are satisfied through purchases in the local market and by a 35-megawatt thermo-electric power generating plant located within the Campana facility. In Dalmine, Italy, we have a 120-megawatt power generation facility which is designed to have sufficient capacity to meet most of the electric power requirements of the operations. The additional energy needed to cover the peaks of consumption and the excess energy produced are purchased and sold to the market while heat is sold for district heating. In Mexico, our electric power requirements are mainly satisfied by Techgen, a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, while a small portion of our energy requirements are furnished by the Mexican government-owned CFE. In the last few years, the Mexican government made various attempts to modify rules and regulations governing the energy market in Mexico with potential impact on the energy supply and its cost. For more information see “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”. In Romania and the United States, we source electric energy from the local market.

We consume substantial volumes of natural gas in Argentina, for the generation of DRI in addition to the requirements for producing seamless pipes. Tecpetrol, a San Faustin subsidiary, is our main natural gas supplier in Argentina under market conditions and according to local regulations.

We have transportation capacity agreements with Transportadora de Gas del Norte S.A. (“TGN”), a company in which San Faustin holds a significant but non-controlling interest, corresponding to capacity of 1,000,000 cubic meters per day until April 2027. In order to meet our transportation requirements for natural gas above volumes contracted with TGN, we also have agreements with Naturgy S.A. (“Naturgy”), for a maximum transportation capacity corresponding to approximately 970,000 cubic meters per day. For the final transportation phase, we also have a supply contract with Naturgy. Both contracts with Naturgy are in place until April 2023 and are expected to be renewed.

In addition to the amount of gas consumed at our Italian plants, we also require a substantial volume of natural gas to feed our power generation facility in Italy. Our natural gas requirements for the power generation facility are currently supplied by Edison Energia S.p.A while the natural gas consumed at our Italian plants is supplied by Eni S.p.A.

Our costs for electric energy and natural gas vary from country to country. Prior to late 2021, energy costs remained generally flat due to the increasing availability of natural gas from shale plays and additional renewable energy generation at more competitive prices. In a context of uncertainty regarding future energy prices, in December 2020, the Argentine government launched a new gas plan to increase natural gas supply following a drop from the maximum levels reached in 2019. Because winter demand for natural gas continues to outpace supply, Argentina is required to import natural gas from Bolivia, Chile and LNG from the international market at high prices, in addition to using liquid fuel to generate electricity. In an international context of higher gas prices and reduced availability, Argentina may be exposed to restrictions in winter, which would affect our operations. In late 2021 energy and gas prices increased, particularly in Europe. The Russian invasion of Ukraine led to renewed volatility in energy commodity prices, accelerated by the low level of inventories throughout the first half 2022, reaching a peak in late August and then slowly stabilizing at high levels. In early 2023, European electricity prices fell to pre-war levels, thanks to lower gas prices, mainly due to a particularly mild winter. Due to milder temperatures, a decrease in demand for gas and the activation of alternative energy, the filling of gas storage facilities in the EU countries remains high. See “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy; and price mismatches between raw materials and our products may hurt our profitability”, “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”, and for more information on the impact on our business of the armed conflict in Ukraine, see “Key Information – Risk Factors – Risks Relating to Our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations”.

Tenaris is building a wind farm in Argentina at a cost of approximately \$200 million which is expected to reduce our CO₂ emissions in that country by around 150,000 tons per year and supply close to 50% of the electric energy requirements at our Siderca integrated seamless pipe mill.

Ferrous alloys

The purchase of ferrous alloys is coordinated globally to ensure supply for each of our steel shops. International prices of ferrous alloys can vary substantially within a short period of time.

Prices for the main ferrous alloys consumed by Tenaris increased significantly during the first half of 2022 (reaching highest levels since 2008). In the second half of 2022 prices suffered a sharp drop but still remained above pre-pandemic levels.

The main drivers for the price peak seen in the first half of 2022 were the world's economic recovery after the COVID-19 pandemic, supporting increased steel production coupled with supply disruptions due to the Russia-Ukraine conflict (as both are significant ferrous alloy producers).

During the second half of 2022 global steel production slowed, especially in Europe as several mills shut down their furnaces due to high energy costs and lower steel demand. In China, demand was also affected by the country's restrictive COVID-19 policies. As a result, ferrous alloy prices decreased on lower demand. Molybdenum prices, however, remained strong and rose considerably mainly due to supply shortages from many mining companies that are struggling with quality issues and labor shortages, as well as better supported demand from both the oil and gas industry and the automotive sector's continued production recovery as component shortages subside.

Product Quality Standards

Our steel products (tubular products, accessories and sucker rods) are manufactured in accordance with the applicable specifications of the American Petroleum Institute ("API"), the American Society for Testing and Materials ("ASTM"), the International Standardization Organization ("ISO"), and European Standards ("EN"), among other standards. The products must also satisfy our proprietary standards as well as our customers' requirements. We maintain an extensive quality control and assurance program to guarantee that our products and services consistently meet proprietary and industry standards bringing a high level of competitiveness.

We currently maintain, for all our manufacturing facilities and service centers, a Quality Management System certified to ISO 9001 by Lloyd's Register Quality Assurance and API product licenses granted by API, which are requirements for selling to the major oil and gas companies and have rigorous quality standards. In addition, the majority of our testing laboratories are certified to ISO 17025. Our Quality Management System ("QMS"), based on ISO 9001, API Q1 and API Q2 specifications, guarantees that products and services comply with customer requirements from the acquisition of raw materials to the delivery of the final product and services. The QMS is designed to ensure the reliability and improvement of the product and the manufacturing operations processes as well as the associated services. Additionally, we have certified the QMS to API Q2 at certain locations, a certification specifically developed for companies that offer services in the oil and gas industry.

All of our mills involved in the manufacturing of material for the automotive market are certified according to the standard IATF 16949 by Lloyd's Register Quality Assurance.

Research and Development

R&D of new products and processes to meet the increasingly stringent requirements of our customers is an important aspect of our business.

R&D activities are carried out primarily at our global R&D network managed and coordinated through its main office in Amsterdam, the Netherlands and specialized research and testing facilities located in Campana, Argentina, in Veracruz, Mexico and in Dalmine, Italy. Additionally, we have a Technology Center in Houston, Texas, where we develop our TenarisHydril Wedge technology. Our R&D capabilities are expanded through the engagement and collaboration with some of the world's leading industrial research institutions to solve the problems posed by the complexities of oil and gas, automotive and mechanical pipe projects with innovative applications. In addition, our global Product Engineering and Technical Sales team is made up of experienced engineers who work with our customers to identify solutions for each particular oil and gas drilling environment.

Product R&D currently being undertaken is focused on the challenging energy markets, which are lately characterized by increasingly efficient oil and gas activities together with growing energy transition related initiatives.

Product R&D includes:

- proprietary Premium Joint products (OCTG) including Dopeless[®] technology;
- proprietary steels for various applications (oil and gas drilling and transportation, hydrogen transportation and storage, carbon dioxide transportation and injection, automotive, etc.);
- heavy-wall deepwater line pipe, risers and welding technology;
- tubes and components for the automotive industry and other mechanical applications;
- large vessels for hydrogen storage and refueling stations;
- tubes for boilers;
- welded pipes for oil and gas and other applications;
- sucker rods;
- coiled tubing;
- coatings; *and*
- new low-carbon products and services for potentially fast-growing segments like hydrogen transportation and storage, CCS and geothermal energy.

In addition to R&D aimed at new or improved products, we continuously study opportunities to optimize our manufacturing processes. Recent projects in this area include hardware, algorithms and numerical modeling applied to rolling, heat treatment, non-destructive testing and finishing processes and the development of different process controls, with the goal of reducing energy consumption, reducing rejects, improving product quality and productivity at our facilities.

We seek to protect our innovations and developments in products and processes through patents, trade secrets, trademarks and other intellectual property tools that allow us to keep our competitiveness and differentiate ourselves from our competitors.

We spent \$50.7 million in R&D in 2022, compared to \$45.3 million in 2021 and \$41.8 million in 2020.

Capitalized costs were not material for the years 2022, 2021 and 2020.

Environmental, Social and Governance (“ESG”) Regulation

We are subject to a wide range of local, provincial and national laws, regulations, permit requirements and decrees relating to environmental, social and governance matters, including laws and regulations relating to climate-change mitigation, use of resources, hazardous materials and radioactive materials, and air emissions, water discharges and waste management; legislation on human rights and modern slavery; human capital, including equal opportunity, gender and disabilities equality, working conditions, work-life balance, and labor market access; and applicable rules on internal control and risk management, anti-corruption, business partner relationship management and other governance issues. For more information on the Company’s governance practices and applicable regulation, see “Directors, Senior Management and Employees” and “Corporate Governance Statement – Corporate Governance”.

ESG regulation has been evolving over the past years and is expected to continue to evolve in the future, particularly with respect to environmental matters. Laws and regulations protecting the environment have become increasingly complex and more stringent and expensive to implement in recent years. Environmental requirements vary from one jurisdiction to another adding complexity to the operations of global companies, such as Tenaris.

The Paris Agreement, adopted at the 2015 United Nations Climate Conference, sets out the global framework to limit the rising temperature of the planet and to strengthen the countries' ability to deal with the effects of climate change. In order to achieve climate neutrality by the year 2050, the European Commission has laid out several action plans, such as the EU climate adaptation strategy, sustainable finance policies and the raw materials alliance. In addition, the EU Non-Financial Reporting Directive provides the legal framework for annual disclosure of non-financial information and, the EU Taxonomy Regulation establishes a classification system for environmentally sustainable economic activities, laying out definitions to businesses, stakeholders and policymakers on which economic undertakings can be considered environmentally sustainable and requiring companies to disclose, in the annual reports, how environmentally sustainable their economic activities are. More recently, as part of the European Green Deal, the EU adopted the Corporate Sustainability Reporting Directive, which requires European large companies and listed issuers to disclose information on their risks and opportunities arising from social and environmental issues, and on the impacts of their activities on people and the environment. In the case of Tenaris, the EU Corporate Sustainability Reporting Directive will apply with respect to the Company's 2024 annual report and will replace non-financial disclosure obligations under the EU Non-Financial Reporting Directive.

Similarly, in response to an increasing investor focus and reliance on climate and ESG-related disclosure and investment, the SEC announced in March 2021 the creation of a Climate and ESG Task Force to identify ESG-related misconduct and potential violations, and in March 2022, the SEC proposed rule changes that would require registrants to include certain climate-related disclosures in their periodic reports, including information about climate-related risks that are reasonably likely to have a material impact on their business, results of operations, or financial condition, and certain climate-related financial statement metrics in a note to their audited financial statements. The SEC's proposal on climate-change disclosure has received strong pushback from investors, companies and lawmakers. Although the revised rules have not been adopted yet, they evidence the SEC's increased concern and focus ESG-related matters.

For more information on the impact of climate change legislations, increasing regulatory requirements and significant technology and market changes, see "Key Information – Risk Factors - Risks Relating to Our Business and Industry – Climate change legislation and increasing regulatory requirements aimed at transitioning to a lower-carbon economy may reduce demand for our products and services and result in unexpected capital expenditures and costs, and negatively affect our reputation". For more information on the steps taken by Tenaris to address climate change challenges, see "Operating and Financial Review and Prospects – Overview – Climate Change".

The ultimate impact of complying with ESG regulations, in particular with applicable environmental regulation, is not always clearly known or determinable because certain laws and regulations have been evolving in the past years or are under constant review by competent authorities. The expenditures required to comply with these laws and regulations, including site or other remediation costs, or costs incurred from potential environmental liabilities, could have a material adverse effect on our financial condition and profitability. While we incur, and will continue to incur, in expenditures to comply with applicable laws and regulations, there always remains a risk that environmental incidents or accidents may occur that may negatively affect our reputation or our operations. For more information on risks and costs related to compliance with environmental regulation and product liability, see "Key Information – Risk Factors - Risks Relating to Our Business and Industry – The cost of complying with environmental regulations and potential environmental and product liabilities may increase our operating costs and negatively impact our business, financial condition, results of operations and prospects".

Compliance with applicable ESG regulation is of utmost importance to the Company and a significant factor in our industry and business. We have not been subject to any significant penalty for any material violation of applicable ESG regulations, including for any material violation of environmental laws and regulations in 2022, 2021 and 2020 and we are not aware of any current material legal or administrative proceedings pending against us with respect to ESG matters, which could have an adverse material impact on our financial condition or results of operations.

Insurance

We carry property damage, general liability and certain other insurance coverage in line with industry practice. However, we do not carry business interruption insurance. Our current general liability coverage includes third party, employers, sudden and accidental seepage and pollution and product liability, up to a limit of \$300 million. Our current property insurance has an indemnification cap up to \$250 million for direct damage, considering all plants; and a deductible of \$75 million.

Disclosure Pursuant to Section 13(r) of the Exchange Act

Tenaris

The Iran Threat Reduction and Syria Human Rights Act of 2012, created a new subsection (r) in Section 13 of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”), which requires a reporting issuer to provide disclosure if the issuer or any of its affiliates knowingly engaged in certain enumerated activities relating to Iran, including activities involving the Government of Iran. The Company is providing the following disclosure pursuant to Section 13(r) of the Exchange Act.

In July 2015, the Islamic Republic of Iran entered into the Joint Comprehensive Plan of Action (“JCPOA”) with China, France, Germany, Russia, the United Kingdom and the United States, which resulted in the partial lifting in January 2016 of certain sanctions and restrictions against Iran, including most U.S. secondary sanctions against such country. On May 8, 2018, the United States announced that it would cease participation in the JCPOA and would begin re-imposing nuclear-related sanctions against Iran after a wind-down period. Following the U.S. withdrawal from the JCPOA, the European Union updated Council Regulation (EC) No. 2271/96 of 22 November 1996 (the “EU Blocking Statute”), to expand its scope to cover the re-imposed U.S. nuclear-related sanctions. The EU Blocking Statute aims to counteract the effects of the U.S. secondary sanctions.

As previously reported, Tenaris ceased all deliveries of products and services to Iran by the end of October 2018, that is, during the wind-down period and before the full reinstatement of U.S. secondary sanctions on November 5, 2018. Tenaris has not, directly or indirectly, delivered any goods or services to Iran or Iranian companies during 2022 and does not intend to explore any commercial opportunities in Iran, nor does it intend to participate in tender offers by, or issue offers to provide products or services to, Iranian companies or their subsidiaries.

As of December 31, 2022, the Company’s subsidiary, TGS, maintains an open balance for an advance made by Toos Payvand Co. for approximately EUR0.04 million (approximately \$0.04 million) for goods that remained undelivered following the reinstatement of U.S. secondary sanctions.

All revenue and profit derived from Tenaris’s sales to Iran was recorded in the fiscal year in which such sales were performed and, therefore, no revenue and profit has been reported in connection with commercial activities related to Iran for the year ended December 31, 2022.

The Company has procedures in place designed to ensure that its activities comply with all applicable U.S. and other international export control and economic sanctions laws and regulations.

Tenaris’s Affiliates

Pursuant to Section 13(r) of the Exchange Act, the Company is also required to disclose whether any of its affiliates have engaged in certain Iran-related activities and transactions. No affiliate of the Company reported any Iran related activity for the year ended December 31, 2022.

Organizational Structure and Subsidiaries

We conduct all our operations through subsidiaries. The following table shows the principal subsidiaries of the Company and its direct and indirect ownership in each subsidiary as of December 31, 2022, 2021 and 2020.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2022	2021	2020
ALGOMA TUBES INC.	Canada	Manufacturing of welded and seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
HYDRIL COMPANY and subsidiaries	USA	Manufacture and marketing of premium connections	100%	100%	100%
IPSCO TUBULARS INC. and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	89%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
SAUDI STEEL PIPE CO.	Saudi Arabia	Manufacturing of welded steel pipes	48%	48%	48%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA INDUSTRIAL Y COMERCIAL and subsidiaries (a)	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPESSOAL LDA.	Portugal	Holding Company	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company, marketing and distribution of steel products	100%	100%	100%
TENARIS INVESTMENTS (NL) B.V. and subsidiaries	Netherlands	Holding company	100%	100%	100%
TENARIS INVESTMENTS S.àr.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS QINGDAO STEEL PIPES LTD.	China	Processing of premium joints, couplings and automotive components	100%	100%	100%
TENARIS TUBOCARIBE LTDA.	Colombia	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris holds 51% of NKK Tubes.

(b) Tenaris holds 98,4% of Tenaris Supply Chain S.A., 40% of Tubular Technical Services Ltd. and Pipe Coaters Nigeria Ltd., 49% of Amaja Tubular Services Limited, 60% of Tenaris Baogang Baotou Steel Pipes Ltd. and until 2021 held 49% of Tubular Services Angola Lda.

Other Investments

Ternium

We have a significant investment in Ternium, a Luxembourg company controlled by San Faustin, whose securities are listed on the NYSE. As of December 31, 2022, the Company held 11.46% of Ternium's share capital (including treasury shares).

The Company is a party to a shareholders' agreement with Techint Holdings S.à.r.l. ("Techint Holdings"), a wholly owned subsidiary of San Faustin and Ternium's main shareholder, dated January 9, 2006, pursuant to which Techint Holdings is required to take actions within its power to cause one of the members of Ternium's board of directors to be nominated by the Company and any directors nominated by the Company to be removed only pursuant to previous written instructions from the Company. The Company and Techint Holdings also agreed to cause any vacancies on Ternium's board of directors to be filled with new directors nominated by either the Company or Techint Holdings, as applicable. The shareholders' agreement will remain in effect so long as each of the parties holds at least 5% of the shares of Ternium or until it is terminated by either the Company or Techint Holdings pursuant to its terms. Carlos Condorelli was nominated by the Company as a director of Ternium pursuant to this shareholders' agreement.

The following factors and circumstances evidence that Tenaris has significant influence over Ternium:

- both the Company and Ternium are under the indirect common control of San Faustin;
- four out of nine members of Ternium's board of directors (including Ternium's Chairman) are also members of the Company's board of directors;
- the Company is entitled to nominate one director to Ternium's board of directors pursuant to the shareholders' agreement between the Company and Techint Holdings described above.

Usiminas

At December 31, 2022, Tenaris held, through its Brazilian subsidiary Confab, 36.5 million ordinary shares and 1.3 million preferred shares of Usiminas, representing 5.19% of its shares with voting rights and 3.07% of its total share capital.

Confab's acquisition of the Usiminas shares was part of a larger transaction performed on January 16, 2012, pursuant to which Tenaris's affiliate Ternium (through certain of its subsidiaries) and Confab acquired a large block of Usiminas ordinary shares and joined Usiminas' existing control group. Subsequently, in 2016, Ternium and Confab subscribed to additional ordinary shares and to preferred shares.

At December 31, 2022, the Usiminas control group held, in the aggregate, 483.6 million ordinary shares bound to the Usiminas shareholders' agreement, representing approximately 68.6% of Usiminas' voting capital. The Usiminas control group, which is bound by a long-term shareholders' agreement that governs the rights and obligations of Usiminas' control group members, is currently composed of three sub-groups: the T/T Group, comprising Confab and certain Ternium entities; the NSC Group, comprising NSC, Metal One Corporation and Mitsubishi Corporation; and Usiminas' pension fund Previdência Usiminas. The T/T Group holds approximately 47.1% of the total shares held by the control group (39.5% corresponding to the Ternium entities and the other 7.6% corresponding to Confab); the NSC Group holds approximately 45.9% of the total shares held by the control group; and Previdência Usiminas holds the remaining 7%.

The corporate governance rules reflected in the Usiminas shareholders' agreement include, among others, an alternation mechanism for the nomination of each of the chief executive officer ("CEO") and the chairperson of the board of directors of Usiminas, as well as a mechanism for the nomination of other members of Usiminas' executive board. The Usiminas shareholders' agreement also provides for an exit mechanism consisting of a buy-and-sell procedure (exercisable at any time after November 16, 2022, and applicable with respect to shares held by NSC and the T/T Group), which would allow either Ternium or NSC to purchase all or a majority of the Usiminas' shares held by the other shareholder.

Confab and the Ternium entities party to the Usiminas shareholders' agreement have a separate shareholders agreement governing their respective rights and obligations as members of the T/T Group. Such separate agreement includes, among others, provisions granting Confab certain rights relating to the T/T Group's nomination of Usiminas' officers and directors under the Usiminas shareholders' agreement. Those circumstances evidence that Tenaris has significant influence over Usiminas, and consequently, Tenaris accounts for its investment in Usiminas under the equity method (as defined by IAS 28).

On March 30, 2023, the Company's subsidiary, Confab, together with Tenaris's affiliates Ternium Investments S.à.r.l and Ternium Argentina, entered into a share purchase agreement to acquire from the NSC Group, pro rata to their current participations in the T/T Group, 68.7 million ordinary shares of Usiminas, increasing Tenaris's participation in the Usiminas control group to 9.8%. Upon the closing of the transaction, the existing shareholders agreement will be replaced by a new shareholders agreement setting forth a new governance structure for Usiminas. For more information on the recently announced agreement for the purchase of Usiminas shares from the NSC Group, see "Financial Information – Significant Changes".

Techgen

Techgen is a Mexican joint venture company owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris. Techgen operates a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, Mexico. Tenaris, Ternium and Tecpetrol are parties to a shareholders' agreement relating to the governance of Techgen.

In the last few years, the Mexican government made various attempts to modify rules and regulations governing the energy market in Mexico with potential impact on the energy supply and its cost. For more information on the risks associated with the energy reform in Mexico, see “Key Information – Risk Factors – Risks Relating to Our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”.

GPC

GPC is a Saudi-German joint venture, established in 2010 and located in Jubail, Saudi Arabia, which manufactures LSAW pipes. Tenaris, through its subsidiary Saudi Steel Pipe Company (“SSPC”), currently owns 35% of the share capital of GPC. In accordance with GPC’s bylaws, SSPC’s 35% equity interest entitles SSPC to appoint four of the eleven members of the board of directors of GPC. In addition, SSPC has the ability to block any shareholder resolution.

In December 2022, EEW, a German company that owns another 35% interest in GPC, expressed its intention to sell its entire interest in GPC for a cash amount of \$9.9 million. SSPC and another shareholder that owns a 20% interest in GPC exercised their respective rights of first refusal. Each such acquisition is subject to customary conditions, including competition clearance and bank consents. If both acquisitions are consummated, SSPC will acquire a 22.3% additional interest in GPC (thus totaling a 57.3% interest).

Unresolved Staff Comments

None

Operating and Financial Review and Prospects

The following discussion and analysis of our financial condition and results of operations are based on, and should be read in conjunction with, our audited consolidated financial statements and the related notes included elsewhere in this annual report. This discussion and analysis present our financial condition and results of operations on a consolidated basis. We prepare our consolidated financial statements in conformity with IFRS. IFRS differ in certain significant respects from U.S. GAAP.

Certain information contained in this discussion and analysis and presented elsewhere in this annual report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. See “Cautionary Statement Concerning Forward-Looking Statements”. In evaluating this discussion and analysis, you should specifically consider the various risk factors identified in “Key Information – Risk Factors”, other risk factors identified elsewhere in this annual report and other factors that could cause results to differ materially from those expressed in such forward-looking statements.

Overview

We are a leading global manufacturer and supplier of steel pipe products and related services for the energy industry and other industries

We are a leading global manufacturer and supplier of steel pipe products and related services for the world's energy industry as well as for other industrial applications. Our customers include many of the world's leading oil and gas companies, engineering companies engaged in constructing oil and gas gathering and processing and power facilities, and industrial companies operating in a range of industries. We operate an integrated worldwide network of steel pipe manufacturing, research, finishing and service facilities with industrial operations in the Americas, Europe, Asia and Africa and a direct presence in most major oil and gas markets.

Our main source of revenue is the sale of products and services to the oil and gas industry, and the level of such sales is sensitive to international oil and gas prices and their impact on drilling activities

Demand for our products and services from the global oil and gas industry, particularly for tubular products and services used in drilling operations, represents a substantial majority of our total Tubes sales. Our sales, therefore, depend on the condition of the oil and gas industry and our customers' willingness to invest capital in oil and gas exploration and development as well as in associated downstream processing activities. The level of these expenditures is sensitive to oil and gas prices as well as the oil and gas industry's view of such prices in the future. Prices fell to historically low levels in the wake of the COVID-19 pandemic and the accompanying collapse in global oil consumption, but subsequently recovered exceeding pre-pandemic levels, particularly in the immediate aftermath of the Russian invasion of Ukraine and the imposition of sanctions on Russian exports of oil and gas. Prices have since fallen back from their highs but global oil and LNG prices remain at levels around \$80/bbl and \$17 per million BTU respectively, which should support further investment in production, although North American natural gas prices (Henry Hub) have fallen below \$3 per million BTU in early 2023 as production rose while the weather during the winter heating season has been unusually mild and one of the main U.S. LNG export terminals has been temporarily closed.

In 2020, the collapse in oil consumption and prices in the wake of the COVID-19 pandemic, deeply affected worldwide drilling activity, as represented in the number of active drilling rigs published by Baker Hughes. This was particularly the case in the Americas, where, in the U.S. for example, drilling activity dropped 54% compared to the previous year. Drilling activity in the Americas recovered along with oil and gas prices in 2021 and 2022. The drop in drilling activity in the Eastern Hemisphere was less pronounced and took longer to manifest itself and the subsequent recovery started later and has been more gradual.

Prior to the 2014 downturn in oil prices, a growing proportion of exploration and production spending by oil and gas companies had been directed at offshore, deep drilling and non-conventional drilling operations in which high-value tubular products, including special steel grades and premium connections, are usually specified. The success, however, of shale drilling operators, with their inherently short investment cycles, in adapting to lower oil and gas prices and increasing production, and the increasing share of oil produced in shale plays as a proportion of global supply, has led to a slowdown in new developments of complex offshore projects with long investment lead times in a context of low and more volatile oil prices, consequently affecting the level of product differentiation. More recently, however, offshore drilling activity has increased again as exploration has continued and cost-competitive developments, like those in Brazil, Guyana, and sub-Saharan Africa, are being sanctioned and developed.

Our business is highly competitive

The global market for steel pipes is highly competitive, with the primary competitive factors being price, quality, service and technology. We sell our products in a large number of countries worldwide and compete primarily against European and Japanese producers in most markets outside North America. In the United States and Canada, we compete against a wide range of local and foreign producers. Over the past two decades, substantial investments have been made, especially in China but also in other regions around the world, to increase production capacity of seamless steel pipe products. Production capacity for more specialized product grades has also increased. With the downturn in the price of oil and demand for tubes for oil and gas drilling between 2014 and 2016, the overcapacity in steel pipe and seamless steel pipe production worldwide became acute, extending beyond commodity grades. This situation has been accentuated by the more recent COVID-19 induced collapse in demand and the prospect of an accelerated energy transition. The competitive environment is, as a result, intense, and we expect that this can only continue without substantial capacity reductions. Effective competitive differentiation and industry capacity closures will be key factors for Tenaris.

In addition, there is an increased risk of unfairly traded steel pipe imports in markets in which we produce and sell our products. In September 2014, the United States imposed anti-dumping duties on OCTG imports from various countries, including South Korea. Despite the duties imposed, imports from South Korea continued at a very high level. As a result, U.S. domestic producers have requested successive reviews of South Korea's exports, which are ongoing. At the same time South Korean producers have appealed the duties imposed. Similarly, in Canada, the Canada Border Services Agency introduced anti-dumping duties on OCTG imports from South Korea and other countries in April 2015.

During 2018, in addition to anti-dumping duties, the U.S. government introduced tariffs and quotas pursuant to Section 232 on the imports of steel products, including steel pipes, with the objective of strengthening domestic production capacity utilization and investment. Quotas were imposed on the imports of steel products from South Korea, Brazil and Argentina, while 25% tariffs were imposed on imports from most other countries, except Australia. The proportion of the OCTG market supplied by imports declined from around 60% prior to the imposition of tariffs and quotas to around 40% at the end of 2020 but has since increased to around 50%.

We are also exposed to the risk that our competitors may seek to initiate anti-dumping cases against our exports. In 2021, anti-dumping cases were initiated against our exports from Mexico into Canada as well as against our exports from Mexico and Argentina into the United States. In Canada, a final determination of no injury was issued in January 2022 in with respect to our imports from Mexico. In the United States, a final determination of injury was issued in October 2022 against our imports from Mexico and Argentina and antidumping duty deposits of 44.93% and 78.30% were imposed on our imports from Mexico and Argentina, respectively. These deposit rates may be reset periodically based on the results of an administrative review process. Tenaris has appealed the duty ruling regarding imports from Mexico and Argentina.

Our production costs are sensitive to prices of steelmaking raw materials and other steel products

We purchase substantial quantities of steelmaking raw materials, including ferrous steel scrap, DRI, pig iron, iron ore and ferroalloys, for use in the production of our seamless pipe products. In addition, we purchase substantial quantities of steel coils and plates for use in the production of our welded pipe products. Our production costs, therefore, are sensitive to prices of steelmaking raw materials and certain steel products, which reflect supply and demand factors in the global steel industry and in the countries where we have our manufacturing facilities.

The costs of steelmaking raw materials and of steel coils and plates increased during 2021, reaching all-time highs. As a reference, prices for hot rolled coils, HRC Midwest USA Mill, published by CRU, averaged \$1,734 per metric ton in 2021 and \$632 per metric ton in 2020. Since this increase occurred when drilling activity was only beginning its recovery from the pandemic-induced collapse, the production of welded pipes in the United States was not economic. It was not until 2022, when hot rolled coil prices averaged \$1,128 per ton and drilling activity recovered to a large extent that welded OCTG production again became economic and we were able to resume welded OCTG production in the United States.

Summary of results

In 2022, our net income reached a record high while our net sales and EBITDA¹ were close to the all-time highs recorded in 2008 just prior to the global financial crisis. Our results rose strongly throughout the year and reached record quarterly levels in the fourth quarter. The increase in sales reflects the strong recovery of oil and gas drilling activity in the Americas, a more delayed recovery in Eastern Hemisphere activity, which is now picking up steam, and the solid contribution of the great majority of our market and product segments.

Operating margins expanded reflecting the higher prices realized on the sales of most of our products that have more than compensated for higher raw material and energy costs and a good industrial performance with increased levels of activity and utilization of production capacity.

Net income more than doubled compared to 2021, despite a much lower contribution from our non-consolidated companies and higher income taxes.

Operating cash flow for the year amounted to \$1,167 million after accounting for a \$2,131 million build up in working capital to support the higher level of sales and the ramp up of our industrial system. After capital expenditures of \$378 million and dividend payments of \$531 million during the year, our net cash position increased to \$921² million at the end of the year.

Climate Change

Tenaris recognizes that climate change presents significant risks to society in general and to its business in particular, taking into account the markets where we operate, the potential impact of government regulations on our operations and those of our customers, and the location of our physical assets. Tenaris also acknowledges that climate change offers strategic opportunities to consolidate its leading market position and diversify sales. For more information on risks relating to climate change regulations, see “Risks Relating to Our Business and Industry - Climate change legislation and increasing regulatory requirements aimed at transitioning to a lower-carbon economy may reduce demand for our products and services and result in unexpected capital expenditures and costs, and negatively affect our reputation”. For more information on the physical risks resulting from climate change, see “Risks Relating to Our Business and Industry - The physical risks resulting from climate change, including extreme weather conditions and shifts in weather patterns, have in the past and may in the future adversely affect our operations and financial results”.

Given the relevance of climate change for Tenaris’s overall business and strategy, the Company's board of directors reviews the development and implementation of our strategy to address climate change on a quarterly basis. The Company's board of directors has appointed its Vice Chairman, Germán Curá, to take responsibility for this topic and keep it informed of the progress made.

As part of our efforts to address climate change, we are investing in and adapting our operations to reduce their carbon intensity, and developing products and services for use in low-carbon energy applications. We regularly assess and track global progress towards the energy transition, monitoring the goals, policies, regulations, technologies and other global and national developments that may speed up or hinder the progress of this transition in the years ahead, or may present any risks to our operations.

We continue to strengthen our disclosure of climate change-related information in accordance with the most relevant international frameworks and standards that are being developed. This year, for example, we are reporting our carbon dioxide emissions using the Greenhouse Gas Protocol (“GHG Protocol”) methodology, which, despite differences with World Steel Association’s (worldsteel) methodology, does not materially alter past reported results.

We work closely with our customers as they seek to establish sustainable sourcing policies throughout their supply chain, thus requiring a more specific disclosure of climate change-related impacts. For this purpose, we have joined the Carbon Disclosure Project (“CDP”) and are using the Ecovadis and Open-es sustainability assessment platforms, among others.

We also encourage the use of sustainable practices among our suppliers and are introducing a Sustainable Sourcing Policy to strengthen our efforts in this area.

¹ EBITDA is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

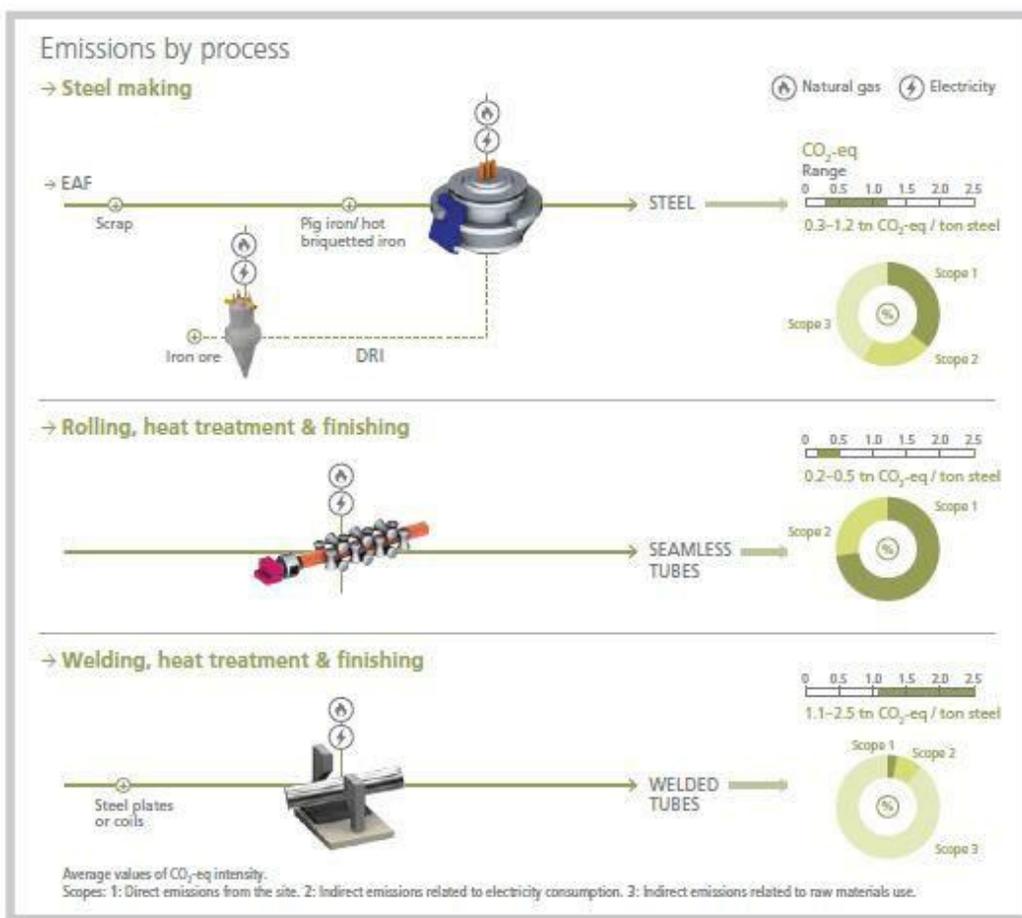
² Net Cash/Debt is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

EAF producer

All the steel we manufacture is produced in electric arc furnaces using recycled steel scrap as the primary source of metallic feedstock. We supplement the use of steel scrap with metallic raw materials such as pig iron, direct reduced iron and ferroalloys to meet quality, productivity and materials specification requirements. In Argentina, where the availability of steel scrap is limited, we operate a facility to produce direct reduced iron using natural gas.

Steel produced in electric arc furnaces using a high proportion of scrap in the metallic charge generally has a substantially lower carbon intensity than steel produced using iron ore and metallurgical coal as the primary feedstock. The carbon emissions intensity for steel products produced at our steel manufacturing sites is around 40% below the average for the global steel industry (as reported by worldsteel).

We also purchase steel from third-party suppliers, primarily for the production of welded pipe products. As many of these suppliers produce steel products using iron ore and coal, the carbon emissions intensity of our pipes produced with this steel is often higher than that of those manufactured using our own steel.



Reducing the carbon intensity of our operations

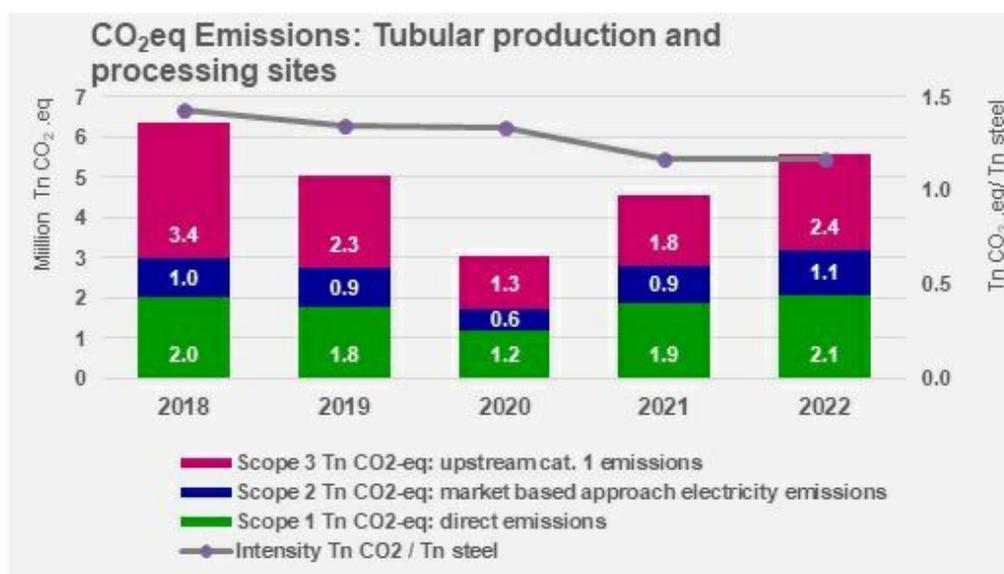
In February 2021, we set a medium-term target to reduce the carbon emissions intensity of our operations by 30% by the year 2030, compared to a 2018 baseline, considering Scopes 1, 2 and 3 emissions. Within Scope 3 emissions, the target considers emissions related to raw materials and steel purchased from third parties, which represents the largest source of our Scope 3 emissions.

To achieve this target, we have increased the proportion of recycled steel scrap in the metallic mix used for the steel we produce, and we are investing in projects to continue improving energy efficiency and increasing the share of renewable or low-carbon electricity, as well as investing to further improve scrap handling and collection in our operations.

In 2022, we invested \$110 million in projects which are expected to help reduce the carbon intensity of our operations and improve their environmental performance. We expect investments in such projects to increase further, accounting for some 30% of our total capital expenditure in 2023.

We have already made good progress towards this strategic objective. By focusing on energy efficiency and increasing the proportion of steel scrap used in our electric furnaces, the carbon emissions intensity of our tubular operations has declined to 1.17 tons of CO₂ equivalent per ton of steel processed. This compares with the 1.43 tons of CO₂ equivalent per ton of steel processed in 2018. Our emissions refer to the GHG Protocol, and have been reviewed by our external auditors.

Much of the reduction in emissions intensity achieved to date has been through increasing scrap use and a reducing the use of purchased pig iron, thus reducing Scope 3 emissions. In 2022, however, Scope 3 emissions intensity rose as we increased the proportion of welded steel pipes in our mix to meet the strong demand for pipeline projects in Latin America and the Middle East. Both the demand for pipeline projects and Scope 3 emissions are expected to rise further in 2023. Nevertheless, we were able to reduce Scope 1 emissions intensity in 2022, largely through greater energy efficiency, and will continue investing in this area as well as in higher scrap use.



CO₂-eq emissions intensity (CO₂-eq ton / ton steel cast or processed)

	2022	2021	2020	2019	2018
Scope 1	0.45	0.47	0.48	0.48	0.43
Scope 2	0.22	0.26	0.26	0.23	0.24
Scope 3	0.76	0.62	0.60	0.46	0.50
Total	1.43	1.35	1.33	1.17	1.17
Intensity variation vs. 2018		(6%)	(6%)	(18%)	(18%)

We are also investing in reducing Scope 2 emissions intensity by using renewable energy at our facilities around the world. We are building a wind farm in Argentina with an investment of approximately \$200 million, due to come into operation in the second half of 2023. The wind farm project is expected to reduce our CO₂ emissions in Argentina by some 150,000 tons per year, supply close to 50% of the electricity requirements at our Siderca mill, and reduce our exposure to government-fixed electric power prices. In Europe, we are making some small renewable energy investments, seeking further opportunities to increase renewables use at our sites.

Our medium-term target to reduce the carbon intensity of our operations is the first step toward decarbonizing them to reach net zero carbon emissions. The timing for achieving this goal depends on different factors, such as emerging technologies as well as market and regulatory conditions, including carbon pricing and customer support. We are allocating substantial resources to our decarbonization strategy, which we also expect to boost our competitive positioning.

As we pursue our strategy of decarbonizing our operations, we are exploring a range of possibilities with our partners from around the world, knowing that there is no one solution and certain alternatives are better suited to specific sites or regions, depending on local infrastructure, resources, and conditions. As industry leaders, we seek to be competitive in offering our customers low-carbon products.

Internal carbon price and financial considerations

To accelerate the fulfilment of our decarbonization targets and anticipate the future implementation of carbon pricing mechanisms around the world, we have introduced an internal carbon price at a minimum of \$80/ton. This internal carbon price is primarily used to evaluate investments in projects that could contribute to lower carbon emissions and decarbonize our operations.

We constantly monitor the evolution of our main customers' strategies and scenarios for future energy demand, considering the global objectives to address climate change by reducing carbon emissions as well as governments' objectives to achieve a carbon-neutral economy. We also assess the future market outlook for our products with reference to the different scenarios for oil and gas demand published by our customers, international agencies such as the International Energy Agency ("IEA"), and expert energy market consultancies, such as Rystad Energy ("Rystad").

We pay particular attention to the historical record and potential pace of change in the adoption of new technologies, regulations and behaviors which may affect future oil and gas demand. These scenarios and assessments provide fundamental input for formulating and evaluating our business strategy and how we address the risks and opportunities posed by climate change.

There are many potential outcomes and much uncertainty about the pace at which the transition may be accomplished as we move from today's use of fossil fuels, including oil and gas, to cleaner fuels, while overall energy demand is expected to rise. Tenaris takes these risks into consideration when evaluating its investments in projects and the acquisition of equipment to produce steel pipes, factoring them into the accounting estimates and assumptions used to assess the carrying value of its assets.

Products for the energy transition

As suppliers of tubular products and services to the energy industry, we see in the energy transition an opportunity to develop new products and services for potentially fast-growing segments like hydrogen transportation and storage, CCS and geothermal installations. In the past two years, we have increased investments in R&D and our organizational focus in these areas, which are expected, eventually, to contribute a relevant revenue stream.

We have developed a range of materials technologies suitable for use in hydrogen storage and transportation, where there is growing demand for large, high-pressure vessels used in the build-out of hydrogen refueling stations for heavy-duty vehicles and buses, mostly in Europe and California. We are also seeing increasing interest from customers in developing CCS projects.

During 2022, we delivered the pipes for a pipeline for the Northern Lights CCS project in Norway. Following extensive product testing, we were awarded a contract to supply casing for CO₂ injection wells for the UK's HyNet project.

Outlook

In an environment where geopolitical and macro-economic risks as well as inflation remain high, global economic prospects have improved following the fall in energy prices in Europe and the reversal of China's COVID lockdown policy. Conditions remain in place for a further increase in investment in the energy industry, with low levels of spare capacity, the implementation of further sanctions on Russian exports and a renewed focus on energy security around the world.

Drilling activity increased during 2022 and, although it has plateaued in North America as we enter 2023, it continues to increase in the Middle East and offshore regions. Global demand for OCTG in 2023 is expected to reach its highest level since 2014. Pipeline activity is also advancing to support oil and gas developments, notably in Argentina and the Middle East.

For the first half of 2023, we expect our sales and EBITDA³ to show a further increase as we continue to ramp up production in North America and increase shipments to pipeline projects. The pricing momentum we saw over the last year is levelling out and we expect that margins will remain close to the current level. Cash flow from operations will increase and we expect to stabilize our working capital requirements by the second quarter.

Functional and presentation currency

The functional and presentation currency of the Company is the U.S. dollar. The U.S. dollar is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Tenaris's global operations.

Starting January 1, 2023, the Company changed the functional currency of its Brazilian subsidiaries, from the Brazilian Real to the U.S. dollar.

This decision is a result of a significant increase of its Brazilian Subsidiaries' participation in the OCTG and line pipe international markets, a trend which started in recent years and intensified in 2022, a greater level of integration of the local operations within Tenaris's international commercial and supply chain system, as well as the fact that the main purchase agreement contracts and the long term sales agreement contracts with major international and local oil companies are both indexed to the U.S. dollar. Local steel prices are also being affected by the U.S. dollar / Brazilian Real fluctuations.

³EBITDA is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

As a result of this change, except for the Italian subsidiaries whose functional currency is the Euro, Tenaris determined that the functional currency of its other subsidiaries is the U.S. dollar, based on the following principal considerations:

- sales are mainly negotiated, denominated and settled in U.S. dollars. If priced in a currency other than the U.S. dollar, the sales price may consider exposure to fluctuation in the exchange rate versus the U.S. dollar;
- prices of critical raw materials and inputs are priced and settled in U.S. dollars;
- transaction and operational environment and the cash flow of these operations have the U.S. dollars as reference currency;
- significant level of integration of local operations within Tenaris's international global distribution network;
- net financial assets and liabilities are mainly received and maintained in U.S. dollars; *and*
- the exchange rate of certain legal currencies has long been affected by recurring and severe economic crises.

Results of operations for subsidiaries whose functional currencies are not the U.S. dollar are translated into U.S. dollars at the average exchange rates for each quarter of the year. Financial statement positions are translated at the year-end exchange rates. Translation differences are recognized in a separate component of equity as currency translation adjustments. In the case of a sale or other disposal of any of such subsidiaries, any accumulated translation difference would be recognized in the Consolidated Income Statement as a gain or loss from the sale or disposal.

Operating Results

The following discussion and analysis of our financial condition and results of operations is based on our audited consolidated financial statements included elsewhere in this annual report. Accordingly, this discussion and analysis present our financial condition and results of operations on a consolidated basis. See "Presentation of Certain Financial and Other Information - Accounting Principles" and "II. Accounting Policies A. Basis of presentation" and "B. Group accounting" to our audited consolidated financial statements included in this annual report. The following discussion should be read in conjunction with our audited consolidated financial statements and the related notes included in this annual report.

Thousands of U.S. dollars (except number of shares and per share amounts)

	For the year ended December 31,		
	2022	2021	2020
Selected consolidated income statement data			
Continuing operations			
Net sales	11,762,526	6,521,207	5,146,734
Cost of sales	(7,087,739)	(4,611,602)	(4,087,317)
Gross profit	4,674,787	1,909,605	1,059,417
Selling, general and administrative expenses	(1,634,575)	(1,206,569)	(1,119,227)
Impairment charge ⁽¹⁾	(76,725)	(57,075)	(622,402)
Other operating income (expenses), net	(212)	61,548	19,141
Operating income (loss)	2,963,275	707,509	(663,071)
Finance income	80,020	38,048	18,387
Finance cost	(45,940)	(23,677)	(27,014)
Other financial results	(40,120)	8,295	(56,368)
Income (loss) before equity in earnings of non-consolidated companies and income tax	2,957,235	730,175	(728,066)
Equity in earnings of non-consolidated companies	208,702	512,591	108,799
Income (loss) before income tax	3,165,937	1,242,766	(619,267)
Income tax	(617,236)	(189,448)	(23,150)
Income (loss) for the year for continuing operations	2,548,701	1,053,318	(642,417)
Income (loss) attributable to ⁽²⁾ :			
Shareholders' equity	2,553,280	1,100,191	(634,418)
Non-controlling interests	(4,579)	(46,873)	(7,999)
Income (loss) for the year ⁽²⁾	2,548,701	1,053,318	(642,417)
Depreciation and amortization	(607,723)	(594,721)	(678,806)
Weighted average number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830
Basic and diluted earnings (losses) per share	2.16	0.93	(0.54)
Dividends per share ⁽³⁾	0.45	0.27	0.07

(1) Impairment charge in 2022 represents a charge of \$77 million to the carrying value of certain idle assets, in 2021 represents a charge of \$57 million to the carrying value of fixed assets of the CGU NKK, and in 2020 represents a charge of \$622 million to the carrying value of goodwill of the CGUs OCTG USA, IPSCO and Coiled Tubing in the amounts of \$225 million, \$357 million and \$4 million respectively, and the carrying value of fixed assets of the CGU Rods USA in the amount of \$36 million.

(2) IAS 1 (revised), requires that income for the year as shown on the income statement does not exclude non-controlling interests. Earnings per share, however, continue to be calculated on the basis of income attributable solely to Shareholders' equity.

(3) Dividends per share correspond to the dividends paid in respect of the year.

<i>Thousands of U.S. dollars (except number of shares)</i>	At December 31,		
	2022	2021	2020
Selected consolidated financial position data			
Current assets	8,468,596	4,981,173	4,287,672
Property, plant and equipment, net	5,556,263	5,824,801	6,193,181
Other non-current assets	3,525,387	3,643,457	3,235,336
Total assets	17,550,246	14,449,431	13,716,189
Current liabilities	2,788,423	1,559,645	1,166,475
Non-current borrowings	46,433	111,432	315,739
Deferred tax liabilities	269,069	274,721	254,801
Other non-current liabilities	411,884	397,931	532,701
Total liabilities	3,515,809	2,343,729	2,269,716
Shareholders' equity	13,905,709	11,960,578	11,262,888
Non-controlling interests	128,728	145,124	183,585
Total equity	14,034,437	12,105,702	11,446,473
Total liabilities and equity	17,550,246	14,449,431	13,716,189
Share capital	1,180,537	1,180,537	1,180,537
Number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830

The following table sets forth our operating and other costs and expenses as a percentage of net sales for the periods indicated.

<i>Percentage of net sales</i>	For the year ended December 31,		
	2022	2021	2020
Continuing operations			
Net sales	100.0	100.0	100.0
Cost of sales	(60.3)	(70.7)	(79.4)
Gross profit	39.7	29.3	20.6
Selling, general and administrative expenses	(13.9)	(18.5)	(21.7)
Impairment charge	(0.7)	(0.9)	(12.1)
Other operating income (expenses), net	(0.0)	0.9	0.4
Operating income (loss)	25.2	10.8	(12.9)
Finance income	0.7	0.6	0.4
Finance cost	(0.4)	(0.4)	(0.5)
Other financial results	(0.3)	0.1	(1.1)
Income (loss) before equity in earnings of non-consolidated companies and income tax	25.1	11.2	(14.1)
Equity in earnings of non-consolidated companies	1.8	7.9	2.1
Income (loss) before income tax	26.9	19.1	(12.0)
Income tax	(5.2)	(2.9)	(0.4)
Income (loss) for the year for continuing operations	21.7	16.2	(12.5)
Income (loss) attributable to:			
Shareholders' equity	21.7	16.9	(12.3)
Non-controlling interests	(0.0)	(0.7)	(0.2)

Fiscal Year Ended December 31, 2022, Compared to Fiscal Year Ended December 31, 2021

The following table shows our net sales by business segment for the periods indicated below:

<i>Millions of U.S. dollars</i>	For the year ended December 31,				Increase / (Decrease)
	2022		2021		
Tubes	11,133	95%	5,994	92%	86%
Others	630	5%	528	8%	19%
Total	11,763	100%	6,521	100%	80%

Tubes

The following table indicates, for our Tubes business segment, sales volumes of seamless and welded pipes for the periods indicated below:

<i>Thousands of tons</i>	For the year ended December 31,				Increase / (Decrease)
	2022		2021		
Seamless	3,146		2,514		25%
Welded	387		289		34%
Total	3,533		2,803		26%

The following table indicates, for our Tubes business segment, net sales by geographic region, operating income and operating income as a percentage of net sales for the periods indicated below:

<i>Millions of U.S. dollars</i>	For the year ended December 31,		Increase / (Decrease)
	2022	2021	
Net sales			
- North America	6,796	3,240	110%
- South America	2,213	1,051	111%
- Europe	867	622	39%
- Middle East & Africa	980	832	18%
- Asia Pacific	277	249	11%
Total net sales	11,133	5,994	86%
Operating income	2,867	613	368%
Operating income (% of sales)	25.8%	10.2%	

Net sales of tubular products and services increased 86% to \$11,133 million in 2022, compared to \$5,994 million in 2021, reflecting a 26% increase in volumes and a 47% increase in average selling prices. Sales increased in all regions, mainly in North America where there was a recovery in volumes and prices throughout the region, led by the U.S. onshore market and in South America mainly due to higher OCTG sales in the region and deliveries for a gas pipeline in Argentina.

Operating results from tubular products and services, amounted to a gain of \$2,867 million in 2022, compared to a gain of \$613 million in 2021. Tubes operating income in 2022 is net of a \$63 million impairment charge, while in 2021 it includes an impairment charge of \$57 million. The improvement in operating results was driven by the recovery in shipment volumes and in prices and higher level of utilization of production capacity, which more than offset an increase in energy and raw material costs.

Others

The following table indicates, for our Others business segment, net sales, operating income and operating income as a percentage of net sales for the periods indicated below:

<i>Millions of U.S. dollars</i>	For the year ended December 31,		Increase / (Decrease)
	2022	2021	
Net sales	630	528	19%
Operating income	96	95	1%
Operating income (% of sales)	15.2%	17.9%	

Net sales of other products and services increased 19% from \$528 million in 2021 to \$630 million in 2022, mainly due to higher sales of sucker rods, of our oilfield services business in Argentina which offers hydraulic fracturing and coiled tubing services and excess raw materials, partially offset by lower sales from the discontinued industrial equipment business in Brazil.

Operating results from other products and services, amounted to a gain of \$96 million in 2022, similar to the \$95 million gained in 2021. Results were mainly derived from our sucker rods business and our oilfield services business in Argentina, partially offset by a \$20 million loss related to our discontinued industrial equipment business in Brazil. The operating income for other products and services in 2022 includes a \$14 million impairment charge.

Selling, general and administrative expenses, or SG&A, amounted to \$1,635 million (13.9% of net sales), compared to \$1,207 million (18.5%) in 2021. The 2022 increase in SG&A is mainly due to higher logistic costs, while they decrease as a percentage of sales.

Impairment charge. In 2022, we recorded a \$77 million impairment: \$63 million on our Tubes segment and \$14 million on our Others segment, while in 2021 we recorded a \$57 million impairment on our Tubes segment, as a result of the termination of the NKKTubes joint venture.

Other operating results amounted to zero in 2022, compared to a gain of \$62 million in 2021. Results in 2022 include a \$78 million charge from the settlement with the U.S. SEC, a \$71 million non-cash gain from the reclassification to the income statement of NKKTubes's cumulative foreign exchange adjustments belonging to the shareholders due to the cease of its operations and an \$18 million gain from the sale of land in Canada after the relocation of the Prudential facility. The gain in 2021 was mainly due to a \$36 million recognition of fiscal credits in Brazil and the profit from the sale of assets.

Financial results amounted to a loss of \$6 million in 2022, compared to a gain of \$23 million in 2021. 2022 financial loss includes a loss of \$10 million related to the change in fair value of certain financial instruments obtained in an operation of settlement of trade receivables and a \$30 million loss related to the transfer of Argentine sovereign bonds paid as dividend from an Argentine subsidiary to its shareholders.

Equity in earnings of non-consolidated companies generated a gain of \$209 million in 2022, compared to \$513 million in 2021. These results were mainly derived from our equity investment in Ternium (NYSE:TX). In 2022 they included \$34 million impairment charges on our participations in the joint venture with Severstal (\$15 million) and in Usiminas (\$19 million).

Income tax charge amounted to \$617 million in 2022, compared to \$189 million in 2021, reflecting the improvement in results in several subsidiaries.

Fiscal Year Ended December 31, 2021, Compared to Fiscal Year Ended December 31, 2020

The following table shows our net sales by business segment for the periods indicated below:

<i>Millions of U.S. dollars</i>	For the year ended December 31,				Increase / (Decrease)
	2021		2020		
Tubes	5,994	92%	4,844	94%	24%
Others	528	8%	303	6%	74%
Total	6,521	100%	5,147	100%	27%

Tubes

The following table indicates, for our Tubes business segment, sales volumes of seamless and welded pipes for the periods indicated below:

<i>Thousands of tons</i>	For the year ended December 31,		Increase / (Decrease)
	2021	2020	
Seamless	2,514	1,918	31%
Welded	289	480	(40%)
Total	2,803	2,398	17%

The following table indicates, for our Tubes business segment, net sales by geographic region, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2021	2020	
Net sales			
- North America	3,240	2,108	54%
- South America	1,051	660	59%
- Europe	622	566	10%
- Middle East & Africa	832	1,194	(30%)
- Asia Pacific	249	315	(21%)
Total net sales	5,994	4,844	24%
Operating income (loss)	613	(616)	200%
Operating income (loss) (% of sales)	10.2%	(12.7%)	

Net sales of tubular products and services increased 24% to \$5,994 million in 2021, compared to \$4,844 million in 2020, reflecting a 17% increase in volumes and a 6% increase in average selling prices. In North America sales increased 54% as there was a recovery in volumes and prices throughout the region, led by the U.S. onshore market. In South America sales increased 59% driven by a recovery in sales in Argentina and the Andean region partially offset by lower sales of connectors in Brazil. In Europe sales increased 10% thanks to a strong growth in sales to the mechanical and automotive sectors partially compensated by lower sales of OCTG products throughout the region. In the Middle East & Africa sales declined 30% as sales in U.A.E. remained stable during the year while sales of OCTG and offshore line pipe declined in the rest of the region. In Asia Pacific sales declined 21% due to lower sales of OCTG throughout the region.

Operating results from tubular products and services, amounted to a gain of \$613 million in 2021, compared to a loss of \$616 million in 2020. Tubes operating income in 2021 is net of a \$57 million impairment charge on NKK Tubes fixed assets and severance charges of \$27 million, while in 2020 the operating loss includes an impairment charge of \$582 million, accelerated depreciations and amortizations of \$56 million and severance charges of \$139 million. The improvement in operating results was driven by the recovery in sales (volumes and prices), while an increase in raw material and energy costs was partially offset by an improvement in industrial performance due to the increased levels of activity and utilization of production capacity.

Others

The following table indicates, for our Others business segment, net sales, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2021	2020	
Net sales	528	303	74%
Operating income (loss)	95	(47)	300%
Operating income (loss) (% of sales)	17.9%	(15.6%)	

Net sales of other products and services increased 74% from \$303 million in 2020 to \$528 million in 2021, mainly due to higher sales of energy and excess raw materials and sucker rods, as well as our new oilfield services business in Argentina which offers hydraulic fracturing and coiled tubing services.

Operating results from other products and services, amounted to a gain of \$95 million in 2021, compared to a loss of \$47 million in 2020. In 2020, Others operating income included an impairment charge of \$40 million. The increase in profitability is mainly due to the sucker rods business, our new oil services business and the sale of excess raw materials and energy.

Selling, general and administrative expenses, or SG&A, amounted to \$1,207 million (18.5% of net sales), compared to \$1,119 million (21.7%) in 2020. During 2021 SG&A includes \$16 million of leaving indemnities, while in 2020 leaving indemnities were \$61 million. The 2021 increase in SG&A is mainly due to higher selling expenses, following the increase in sales.

Impairment charge. In December 2021, as a result of the expected termination of our NKK Tubes joint venture, we recorded a \$57 million impairment on its fixed assets. In 2020 we recorded an impairment charge of \$622 million on the carrying value of goodwill and other assets in the United States.

Other operating results amounted to a gain of \$62 million in 2021, compared to a gain of \$19 million in 2020. The gain in 2021 is mainly due to a \$36 million recognition of fiscal credits in Brazil and the profit from the sale of assets.

Financial results amounted to a gain of \$23 million in 2021, compared to a loss of \$65 million in 2020. The variation is mainly explained by a \$23 million improvement in net interest income, mainly due to interests from fiscal credits in Brazil received in the second quarter, and a \$64 million improvement in net foreign exchange results, mainly related to the depreciation of the Euro, the Brazilian real and the Mexican peso in 2020. These results are to a large extent offset by changes to our currency translation reserve.

Equity in earnings of non-consolidated companies generated a gain of \$513 million in 2021, compared to \$109 million in 2020. These results were mainly derived from our equity investments in Ternium and Usiminas, and reflect the good dynamics at the flat steel sector derived from record high steel prices.

Income tax charge amounted to \$189 million in 2021, compared to \$23 million in 2020, reflecting better results in several subsidiaries following the increase in activity in 2021.

Net income amounted to \$1,053 million in 2021, compared with a net loss of \$642 million in 2020. The change in results reflects the recovery in sales (volumes and prices) following the improvement in the operating environment, while an increase in raw material and energy costs was partially offset by an improvement in industrial performance due to the increased levels of activity and utilization of production capacity. Additionally, our results in 2021 were boosted by an extraordinary contribution from our equity participations, mainly Ternium, reflecting the good dynamics in the flat steel sector derived from record high steel prices, while 2020 was impacted by a \$622 million impairment on the carrying value of goodwill and other assets in the United States.

Liquidity and Capital Resources

The following table provides certain information related to our cash generation and changes in our cash and cash equivalents position for each of the last three years:

Millions of U.S. dollars

	For the year ended December 31,		
	2022	2021	2020
Net cash provided by operating activities	1,167	119	1,520
Net cash (used in) provided by investing activities	(164)	268	(2,092)
Net cash used in financing activities	(178)	(648)	(375)
Increase (decrease) in cash and cash equivalents	825	(261)	(947)
Cash and cash equivalents at the beginning of year (excluding overdrafts)	318	585	1,554
Effect of exchange rate changes	(52)	(6)	(22)
Increase (decrease) in cash and cash equivalents	825	(261)	(947)
Cash and cash equivalents at the end of year (excluding overdrafts)	1,091	318	585
Cash and cash equivalents at the end of year (excluding overdrafts)	1,091	318	585
Bank overdrafts	0	0	0
Other current investments	438	398	872
Non-current investments	114	313	239
Derivatives hedging borrowings and investments	6	2	8
Current borrowings	(682)	(220)	(303)
Non-current borrowings	(46)	(111)	(316)
Net cash at the end of the year	921	700	1,085

Our financing strategy aims to maintain adequate financial resources and access to additional liquidity. During 2022 cash flow provided by operating activities amounted to \$1,167 million (including an increase in working capital of \$2,131 million), our capital expenditures amounted to \$378 million, and we paid dividends amounting to \$531 million. At the end of the year, we had a net cash position⁴ of \$921 million, compared to \$700 million at the beginning of the year.

⁴ Net cash position is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

We believe that funds from operations, the availability of liquid financial assets and our access to external borrowing through the financial markets will be sufficient to satisfy our working capital needs, to finance our planned capital spending program as well as to service our debt in the future twelve months and to address short-term changes in business conditions.

We have a conservative approach to the management of our liquidity, which consists of (i) cash and cash equivalents (cash in banks, liquidity funds and investments with a maturity of less than three months at the date of purchase), and (ii) other investments (fixed income securities, time deposits, and fund investments).

As December 31, 2022, liquid financial assets as a whole (comprising cash and cash equivalents and other investments) were 9% of total assets compared to 7% at the end of 2021.

We hold investments primarily in liquidity funds and variable or fixed-rate securities from investment grade issuers. We hold our cash and cash equivalents primarily in U.S. dollars and in major financial centers. As of December 31, 2022, and December 31, 2021, U.S. dollar denominated liquid assets represented 87% of total liquid financial assets.

Fiscal Year Ended December 31, 2022, Compared to Fiscal Year Ended December 31, 2021

Operating activities

Net cash provided by operations during 2022 was \$1,167 million, compared to \$119 million during 2021. This increase was mainly attributable to the better results during the year, as net income for 2022 amounted to \$2,549 million in 2022 and \$1,053 million in 2021, partially offset by a higher increase in working capital, which amounted to \$2,131 million in 2022, while in 2021 the increase in working capital amounted to \$1,071 million. The annual variation in working capital was mainly attributed to an increase of \$1,330 million in inventories and \$1,208 in trade receivables, compared to an increase of \$1,085 million in inventories and \$356 million in trade receivables in 2021. For more information on cash flow disclosures and changes to working capital, see note 29 “Cash flow disclosures” to our audited consolidated financial statements included in this annual report.

Investing activities

Net cash used in investing activities was \$164 million in 2022, compared to a net cash provided by investing activities of \$268 million in 2021. In 2022 we decreased our financial investments by \$123 million compared to a decrease of \$390 million in 2021, while capital expenditures amounted to \$378 million in 2022 compared to \$240 in 2021.

Financing activities

Net cash used in financing activities, including dividends paid, proceeds and repayments of borrowings and acquisitions of non-controlling interests, was \$178 million in 2022, compared to \$648 million in 2021.

During 2022 we had net proceeds of borrowings of \$417 million while in 2021 we had net repayments of borrowings of \$277 million.

Dividends paid during 2022 amounted to \$531 million and during 2021 amounted to \$319 million.

Our total liabilities to total assets ratio was 0.20:1 as of December 31, 2022 and 0.16:1 as of December 31, 2021.

Fiscal Year Ended December 31, 2021, Compared to Fiscal Year Ended December 31, 2020

Operating activities

Net cash provided by operations during 2021 was \$119 million, compared to \$1,520 million during 2020. This decrease was mainly attributable to a \$1,071 million increase in working capital in 2021, while in 2020 the decrease in working capital amounted to \$1,055 million, offset by an impairment charge of \$622 million in 2020. The annual variation in working capital was mainly attributed to an increase of \$1,085 million in inventories related to the recovery in activity, compared to a decrease of \$819 million in 2020. For more information on cash flow disclosures and changes to working capital, see note 29 “Cash flow disclosures” to our audited consolidated financial statements included in this annual report.

Investing activities

Net cash provided by investing activities was \$268 million in 2021, compared to a net cash used in investing activities of \$2,092 million in 2020. We decreased our financial investments by \$390 million in 2021 compared to an increase of \$887 million in 2020. Additionally, during 2020 we spent \$1,025 million in acquisition of subsidiaries.

Financing activities

Net cash used in financing activities, including dividends paid, proceeds and repayments of borrowings and acquisitions of non-controlling interests, was \$648 million in 2021, compared to \$375 million in 2020.

During 2021 and 2020 we had net repayments of borrowings of \$277 million and \$239 million respectively.

Dividends paid during 2021 amounted to \$319 million and during 2020 amounted to \$83 million.

Our total liabilities to total assets ratio was 0.16:1 as of December 31, 2021 and 0.17:1 as of December 31, 2020.

Principal Sources of Funding

During 2022, we funded our operations with operating cash flows, bank financing and available liquid financial assets. Short-term bank borrowings were used as needed throughout the year.

Financial liabilities

During 2022 borrowings increased by \$398 million to \$729 million at December 31, 2022, from \$331 million at December 31, 2021.

Borrowings consist mainly of bank loans. As of December 31, 2022, U.S. dollar-denominated borrowings plus borrowings denominated in other currencies swapped to the U.S. dollar represented 78% of total borrowings.

For further information about our financial debt, please see note 20 “Borrowings” to our audited consolidated financial statements included in this annual report.

The following table shows the composition of our financial debt at December 31, 2022, 2021 and 2020:

<i>Millions of U.S. dollars</i>	2022	2021	2020
Bank borrowings	729	331	619
Bank overdrafts	0	0	0
Total borrowings	729	331	619

Our weighted average interest rates before tax (considering hedge accounting), amounted to 9.45% at December 31, 2022 and to 2.09% at December 31, 2021.

The maturity of our financial debt is as follows:

<i>Millions of U.S. dollars</i>					
At December 31, 2022	1 year or less	1 - 2 years	2 - 3 years	Over 3 Years	Total
Borrowings	682	42	3	2	729
Interest to be accrued (*)	26	1	0	0	27
Total	708	43	3	2	756

(*) Includes the effect of hedge accounting.

Our current borrowings to total borrowings ratio amounted to 0.94:1 as of December 31, 2022, and to 0.66:1 as of December 31, 2021. Our liquid financial assets exceeded our total borrowings, we had a net cash position⁵ (cash and cash equivalents, other current and non-current investments, derivatives hedging borrowings and investments, less total borrowings) of \$921 million at December 31, 2022, compared to \$700 million at December 31, 2021.

As of December 31, 2022, lease liabilities amounted to approximately \$112 million. The amount of remaining payments with maturities of less than 1 year, between 2 and 5 years and more than 5 years was approximately 25%, 48% and 27%, respectively, of the total remaining payments.

As of December 31, 2021, lease liabilities amounted to approximately \$117 million. The amount of remaining payments with maturities less than 1 year, between 2 and 5 years and more than 5 years was approximately 29%, 34% and 37%, respectively, of the total remaining payments.

For information on our derivative financial instruments, please see “Quantitative and Qualitative Disclosure about Market Risk – Accounting for Derivative Financial Instruments and Hedging Activities” and note 25 “Derivative financial instruments” to our audited consolidated financial statements included in this annual report.

For information regarding the extent to which borrowings are at fixed rates, please see “Quantitative and Qualitative Disclosure About Market Risk”.

Significant Borrowings

Our most significant borrowings as of December 31, 2022 were as follows:

Millions of U.S. dollars

Disbursement date	Borrower	Type	Final maturity	Outstanding
2022	Tamsa	Bilateral	2023	100
2022	Maverick	Bilateral	2023	100
2022	Tubos del Caribe	Bilateral	2023	90
2020	Tamsa	Bilateral	2023	80
2022	Siderca	Bilateral	2023	55

As of December 31, 2022, Tenaris was in compliance with all of its covenants under its significant borrowings, including financial covenants on leverage ratio.

Trend Information

Principal Factors Affecting Oil and Gas Prices and Demand for Steel Pipes from the Global Oil and Gas Industry

Sales to the oil and gas industry worldwide represent a high percentage of our total sales, and demand for steel pipes from the global oil and gas industry is a significant factor affecting the general level of volumes and prices for our products. Downward pressures on oil and gas prices usually result in lower oil and gas drilling activity and investment throughout the oil and gas industry with consequently lower demand for our steel pipe products and, in some circumstances, upward pressures can result in higher demand from our oil and gas customers.

Whereas oil prices are similar in most parts of the world because oil is a fully tradable commodity, gas prices are influenced by regional factors. In North America, where gas production is extensively developed and there is an extensive regional pipeline system, these factors include available gas storage capacity and seasonal weather patterns, particularly winter temperatures in the United States. LNG prices were traditionally established in relation to international oil prices, particularly in the largest LNG markets in Asia. However, as the market for LNG becomes more global and the United States becomes a relevant source of LNG, LNG prices are now being set increasingly in relation to gas prices prevailing at regional gas hubs. In 2022, spot LNG prices completely decoupled from oil prices as pipeline gas imports to Europe from Russia were substantially reduced consequent to the Russian invasion of Ukraine and European countries dramatically increased imports of LNG to replace Russian gas.

⁵ Net cash position is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

International oil prices depend on diverse factors. On the supply side, major oil-and-gas-producing nations and companies have frequently collaborated to balance the supply (and thus the price) of oil in the international markets. A major vehicle for this collaboration has been OPEC, and more recently what has become known as OPEC+, which includes OPEC members, plus Russia and certain other countries. Many of our customers are state-owned companies in member countries of OPEC and OPEC+. Another factor that has affected the international price level of oil is the political and socioeconomic conditions of oil-producing countries, such as Libya, Nigeria and Venezuela and the persistence of geopolitical and armed conflicts, such as the recent Ukraine-Russia armed conflict, and conflicts affecting the Middle East region, which is home to a substantial proportion of the world's known oil reserves. See "Key Information – Risk Factors – Risks Relating to Our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations".

On the demand side, economic conditions and the level of oil inventories have traditionally played a role in oil prices and will continue to do so. Increasingly, however, the rate of substitution of oil and gas by alternative, cleaner fuel sources such as renewables, as well as policies adopted by governments and financing entities worldwide to accelerate the energy transition and by oil and gas companies to adapt their strategies to the energy transition, will also play a significant role in oil prices.

Another factor affecting oil and gas prices has been the ability of producers in the United States and Canada to rapidly increase production from their reserves of tight oil and shale gas in response to changes in market conditions. Production from U.S. tight oil reserves has grown in recent years to represent over 10% of global liquids production, and production from shale gas plays has converted the United States into a net exporter of natural gas and a major player in the LNG market.

Following three years of relatively stable oil prices of around \$100 per barrel, prices started to decline in the middle of 2014 as the rate of U.S. production increase began to exceed the increase in global demand and OPEC confirmed at its November 2014 meeting that it would not cut production to balance demand. Consequently, prices reached levels below \$30 per barrel in January 2016. Prices then recovered to around \$80 per barrel during 2018 once OPEC and other producers agreed to cut production levels to accelerate the market rebalancing process. By this time, OPEC and other producers had lifted their production cuts and U.S. oil production was increasing at a rate greater than the increase in global demand. Oil prices declined 40% in the fourth quarter of 2018 before partially recovering in 2019. In 2020, the COVID-19 pandemic caused a sudden and precipitous drop in global oil demand and oil prices collapsed even entering negative territory at one point. Since then, prices have recovered above their pre-pandemic level with the recovery in demand and actions by OPEC member countries and other producers to cut and then gradually increase production levels. In addition, energy and commodity prices spiked upwards at the onset of the armed conflict involving Russia and Ukraine although they have subsequently fallen back to a large extent. LNG prices, fell back at the end of 2022 and beginning of 2023 reflecting unusually warm winter weather conditions and reduced industrial demand in Europe which resulted in far lower drawdowns from storage than is customary for this period of the year. For more information on the impact of the armed conflict in Ukraine, see "Key Information – Risk Factors – Risks Relating to Our Business and Industry – The Russia-Ukraine armed conflict may adversely affect our operations".

The 2014 collapse of oil prices, led oil and gas operators to substantially reduce their exploration and production investments. This, in turn, resulted in a severe contraction in demand and pressure on pricing for steel pipes used in oil and gas drilling and associated operations. During 2017, however, oil and gas operators in North America, who were very successful in reducing production costs and increasing drilling efficiencies in their shale plays, increased investments in response to more favorable market conditions, and U.S. operators continued to do so in 2018. However, from 2019, operators have reduced investment in the shales as they reacted to financial market pressures to achieve positive cash flow returns. With the collapse of oil prices in March 2020 and continuing pressure from financial markets to generate positive free cash flows⁶, oil and gas operators around the world made further substantial reductions in their exploration and production investments, to a level around 40% of the average of the 2012-2014 period. Although investments have been increasing again, global spending on exploration and production remained well below pre-pandemic levels during 2022.

Since the development of the prolific Marcellus shale gas play, North American gas prices have remained at low levels compared to previous decades and relative to other major gas-consuming regions and global LNG prices. For several years, production increases, primarily from productive shale gas deposits, have exceeded regional demand increases, reducing the need for imports, to the extent that, in 2017, the United States became a net exporter of natural gas. Low prices have encouraged investment in gas consuming industrial facilities and LNG export facilities as well as switching from coal to gas for electric power production, particularly with the adoption of new regulations which could force the retirement of older coal-based generating units. With continuing investments in LNG export facilities, the United States has become a major global LNG exporter, and, over the past two years, has brought more new LNG capacity to the international market than any other producer.

⁶ Free cash flow is a non-IFRS alternative performance measure—please see Exhibit 15.2 for more information on this measure.

Until the Russian invasion of Ukraine LNG prices used to reflect supply and demand conditions in Asia, the major LNG-consuming region, although demand had been increasing in regions like Europe, which imports LNG to supplement its traditional pipeline imports from Russia and other neighboring gas-producing regions, and South America, which imports LNG in its winter season and to supplement hydroelectric energy when rainfall is low. In 2022, however, Europe became a major competitor to Asia in the LNG market as it sought to replace Russian pipeline gas at almost any cost. As Europe phases out imports of pipeline gas from Russia, demand for LNG in Europe is likely to continue to grow in the coming years, and this is changing the price dynamics of the industry. Demand and prices are likely to remain high until a new wave of capacity in Qatar and North America can be brought on stream from 2025. Consumption, though not necessarily prices, will continue to show seasonal fluctuations, increasing in the North Asian winter period and declining in the summer months. The efforts to fill European storage capacity and increase import capacity has, however, increased price volatility.

U.S. natural gas prices increased during 2021, reaching \$6 per million BTU as LNG export capacity came on stream and demand increased. In late 2022 and early 2023, prices declined to a level of \$2-3 per million BTU in February 2023 as LNG export demand was capped by capacity limitations and the temporary shutdown of a facility while domestic demand during the winter heating season was lower than usual.

Drilling activity in the United States and Canada, following several years of high activity, fell sharply through 2015 and the first half of 2016 before beginning a recovery which ended at the end of 2018. Drilling activity declined throughout 2019 in response to a fall in oil prices at the end of 2018 and financial market pressures to produce positive cash flow returns. This decline turned into a collapse with the onset of the COVID-19 pandemic in 2020. Since then, there has been a steady recovery through 2021 and 2022. Production levels today are higher than before the 2014 collapse of oil prices but rig counts are much lower, reflecting the strong productivity gains made by the U.S. oil and gas drilling industry. In the rest of the world, drilling activity began to decline in the second half of 2014, continued to decline during 2015, 2016 and 2017 before a gradual recovery in the second half of 2018 and 2019. Following the onset of the COVID-19 pandemic in 2020, drilling activity in the Eastern Hemisphere declined more slowly and later than in Latin America but then recovered later and more gradually than in Latin America.

Prior to the 2014 downturn in oil prices, a growing proportion of exploration and production spending by oil and gas companies had been directed at offshore, deep drilling and non-conventional drilling operations in which high-value tubular products, including special steel grades and premium connections, are usually specified. The success, however, of shale drilling operators, with their inherently short investment cycles, in adapting to lower oil and gas prices and increasing production, led to a slowdown in new developments of complex offshore projects with long investment lead times in a context of low and more volatile oil prices, consequently affecting the level of product differentiation. More recently, however, offshore drilling activity has increased again as exploration has continued and cost-competitive developments, like those in Brazil, Guyana, and sub-Saharan Africa, are being sanctioned and developed.

In addition, the increasing cost competitiveness and use of alternative renewable sources of energy will limit growth in demand for oil and gas and put downward pressure on oil and gas prices in the longer term. This trend will accelerate if carbon taxes or carbon pricing instruments resulting in high prices for carbon emissions, or other regulations aimed at reducing the use of fossil fuels, are implemented around the world. There has been a substantial increase in the number of commitments to reduce carbon emissions from governments and public companies, including those operating in the oil and gas industry, and increased calls on governments and financial entities to introduce regulations and policies to accelerate the energy transition away from fossil fuels to cleaner sources of energy. Major oil and gas companies have been adapting their strategies to address the energy transition and some are even setting out commitments to significantly reduce production as early as 2030. For more information on climate change regulations, see “Key Information – Risk Factors – Risks Relating to Our Business and Industry - Climate change legislation and increasing regulatory requirements aimed at transitioning to a lower-carbon economy may reduce demand for our products and services and result in unexpected capital expenditures and costs, and negatively affect our reputation”.

On the other hand, we expect that the energy transition will create new markets for the use of our products and services including in the transportation and storage of hydrogen and for carbon capture and sequestration systems. We constantly monitor the evolution of the strategies of our main customers and scenarios for future energy demand, considering the global objectives for addressing climate change through the reduction of carbon emissions and national objectives to achieve carbon-neutrality. We also assess the market outlook for our products with reference to the different scenarios for oil and gas demand published by our customers, international agencies such as the IEA and expert energy market consultancies such as Rystad, with particular reference to scenarios that are consistent with the goals of the Paris Agreement and those focused on technological change and the rate of adoption of new technologies. These assessments are used as fundamental input for evaluating our business strategy and how to address the risks and opportunities arising from climate change.

The tables below show the annual average number of active oil and gas drilling rigs, or rig count, in the United States, Canada, Latin America and Eastern Hemisphere (worldwide other than the United States, Canada and Latin America, excluding Iran, Sudan, onshore China, Russia and Syria) and Worldwide, as published by Baker Hughes, for the years indicated and the percentage increase or decrease over the previous year. Baker Hughes, a leading oil service company, has published its rig counts on a monthly basis since 1975 as a general indicator of activity in the oil and gas sector.

Rig count

	2022	2021	2020	2019
Latin America	168	137	107	190
Other International (*)	683	618	718	908
Canada	175	132	89	134
United States	723	478	433	943
Worldwide	1,749	1,365	1,347	2,175

(*) Excludes Iran, Sudan, onshore China, Russia and Syria (discontinued in February 2013).

Percentage increase (decrease) over the previous year

	2022	2021	2020
Latin America	23%	28%	(44%)
Other International (*)	11%	(14%)	(21%)
Canada	33%	48%	(33%)
United States	51%	10%	(54%)
Worldwide	28%	1%	(38%)

(*) Excludes Iran, Sudan, onshore China, Russia and Syria (discontinued in February 2013).

Critical Accounting Estimates

This discussion and analysis of our financial condition and results of operations is based on our audited consolidated financial statements, which have been prepared in accordance with IFRS. IFRS differs in certain significant aspects from U.S. GAAP.

The preparation of our audited consolidated financial statements and related disclosures in conformity with IFRS requires us to make estimates and assumptions that might affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities and the reported amounts of revenue and expenses. Management evaluates its accounting estimates and assumptions, including those related to impairment of goodwill and long-lived assets; impairment in investment in associates; income taxes; obsolescence of inventory; contingencies; allowance for trade receivables; post-employment and other long-term benefits; business combinations; useful lives of property, plant and equipment and other long-lived assets; fair value estimation of certain financial instruments and property title ownership restriction, and revises them when appropriate. Management bases its estimates on historical experience and on various other assumptions it believes to be reasonable under the circumstances. These estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Although management believes that these estimates and assumptions are reasonable, they are based upon information available at the time they are made. Actual results may differ significantly from these estimates under different assumptions or conditions. For more information see "II. Accounting Policies" to our consolidated financial statements included in this annual report.

Directors, Senior Management and Employees

Directors and Senior Management

Board of Directors

Management of the Company is vested in a board of directors with the broadest power to act on behalf of the Company and accomplish or authorize all acts and transactions of management and disposal that are within its corporate purpose and not specifically reserved in the articles of association or by applicable law to the general shareholders' meeting. The Company's articles of association provide for a board of directors consisting of a minimum of three and a maximum of fifteen directors; however, for as long as the Company's shares are listed on at least one regulated market, the minimum number of directors must be five. The Company's current board of directors is composed of eleven directors.

The board of directors is required to meet as often as required by the interests of the Company and at least four times per year. Board of directors' meetings can be validly held by means of teleconference call, video conference or any other means genuinely allowing for the participation, interaction and intercommunication of the attending directors. Written decisions, signed by all the directors, are proper and valid as though they had been taken at a meeting of the board of directors duly convened and held. In 2022, the Company's board of directors met nine times and adopted four unanimous written resolutions. A majority of the members of the board of directors in office present or represented at the board of directors' meeting constitutes a quorum, and resolutions may be adopted by the vote of a majority of the directors present or represented. In case of a tie, the chairman is entitled to cast the deciding vote.

Directors are elected at the annual ordinary general shareholders' meeting to serve one-year renewable terms, as determined by the general shareholders' meeting. The general shareholders' meeting also determines the number of directors that will constitute the board and their compensation. The general shareholders' meeting may dismiss all or any one member of the board of directors at any time, with or without cause, by resolution passed by a simple majority vote, irrespective of the number of shares represented at the meeting.

The Company's articles of association provide that the board of directors of the Company may within the limits of applicable law, (a) delegate to one or more persons, whether or not members of the board of directors, the powers necessary to carry out its decisions and to provide day-to-day management (except for approval of material transactions with related parties, which may not be delegated and shall be approved by the board of directors prior opinion of the audit committee), (b) confer to one or more persons, whether or not members of the board of directors the powers deemed to be appropriate for the general technical, administrative and commercial management of the Company, (c) constitute an audit committee formed by directors, determining its function and authority, and (d) constitute any other committee, whose members may or may not be members of the board of directors and determine their functions and authority. On May 3, 2022, the board of directors appointed Tenaris's chief executive officer as *administrateur délégué* and delegated to him the power to manage the Company's affairs within the ordinary course of business, to the full extent permitted by Luxembourg law, to direct and supervise the business activities of the Company's subsidiaries and to represent the Company in relation to such matters.

On May 3, 2022, the Company's annual general shareholders' meeting appointed Ms. Maria Novales-Flamarique to the board of directors and re-appointed Mr. Simon Ayat, Mr. Roberto Bonatti, Mr. Carlos Condorelli, Mr. Germán Curá, Mr. Roberto Monti, Mr. Gianfelice Mario Rocca, Mr. Paolo Rocca, Mr. Jaime José Serra Puche, Ms. Monica Tiuba and Mr. Guillermo Vogel, as members of its board of directors, each board member to serve until the next annual shareholders' meeting that will be convened to decide on the Company's 2022 annual accounts. The board of directors subsequently reappointed Paolo Rocca as board chairman and Tenaris's chief executive officer and Guillermo Vogel and Germán Curá as vice chairmen of the board.

The following table sets forth the name of the Company's current directors, their respective positions on the board of directors, their principal occupation, their years of service as board members and their age.

Name	Position	Principal Occupation	Years as Board Member	Age at December 31, 2022
Mr. Simon Ayat	Director	Director of the Company	3	68
Mr. Roberto Bonatti ⁽¹⁾	Director	Director of San Faustin	20	73
Mr. Carlos Condorelli	Director	Director of the Company and Ternium	16	71
Mr. Germán Curá	Director	Director and Vice Chairman of the Company's board of directors	5	60
Mr. Roberto Monti	Director	Director of YPF S.A.	18	83
Mrs. Maria Novales-Flamarique	Director	Strategy Advisor	1	46
Mr. Gianfelice Mario Rocca ⁽¹⁾	Director	Chairman of the board of directors of San Faustin	20	74
Mr. Paolo Rocca ⁽¹⁾	Director / CEO	Chairman of the Company's board of directors and Tenaris's chief executive officer	21	70
Mr. Jaime José Serra Puche	Director	Chairman of S.A.I. Derecho & Economía	20	71
Ms. Monica Tiuba	Director	Director of the Company and chairperson of the Company's audit committee	5	44
Mr. Guillermo Vogel	Director	Director and Vice Chairman of the Company's board of directors	20	72

(1) Paolo Rocca and Gianfelice Mario Rocca are brothers, and Roberto Bonatti is Paolo and Gianfelice Mario Rocca's first cousin.

Simon Ayat. Mr. Ayat is a member of the Company's board of directors and of its audit committee. He served as Schlumberger's executive vice president and chief financial officer from 2007 until early 2020 and as senior strategic advisor to the chief executive officer of Schlumberger until January 2022. Mr. Ayat has held several financial and operational positions in Schlumberger, where he commenced his career in 1982. He was based in Paris, Houston and Dallas, as well as in the Middle East and Far East regions, serving as group treasurer, controller, geomarket manager for Indonesia and drilling regional vice president for Asia Pacific. Mr. Ayat is also a member of the board of directors of Liberty Oilfield Services, a leading provider of hydraulic fracturing and wireline services to E&P companies in North America. He is a French and Lebanese citizen.

Roberto Bonatti. Mr. Bonatti is a member of the Company's board of directors. He is a grandson of Agostino Rocca, founder of the Techint Group, a group of companies controlled by San Faustin. Throughout his career in the Techint Group he has been involved specifically in the engineering and construction and corporate sectors. He was first employed by the Techint Group in 1976, as deputy resident engineer in Venezuela. In 1984, he became a director of San Faustin, and from 2001 until 2020 he has served as its president. He is also a member of the board of directors of Ternium. Mr. Bonatti is an Italian citizen.

Carlos Condorelli. Mr. Condorelli is a member of the Company's board of directors. He served as the Company's chief financial officer from October 2002 until September 2007. He is also a board member of Ternium. He has held several positions within Tenaris, including also the chief financial officer position in some of the principal Tenaris Group companies and member of the Company's audit committee between November 1, 2017 and May 2, 2018. He also served as president of the board of directors of Empresa Distribuidora La Plata S.A. ("Edelap"), an Argentine utilities company. Mr. Condorelli is an Argentine citizen.

Germán Curá. Mr. Curá is a member of the Company's board of directors and also holds the position of Vice Chairman of the Company's board of directors. He served as president of our operations in North America until May 2, 2018, a position held since 2006. He was first employed by Siderca in 1988. Previously, he served as Siderca's exports director, Tamsa's exports director and commercial director, sales and marketing manager of our Middle East subsidiary, president of Algoma Tubes, president and chief executive officer of Maverick Tubulars and president and chief executive officer of Hydril, director of our Oilfield Services global business unit and Tenaris commercial director. He was also a member of the board of directors of API and of the American Iron and Steel Institute ("AISI"). He is a marine engineer from the Instituto Tecnológico de Buenos Aires and an MBA graduated from the Massachusetts Institute of Technology. Mr. Curá is an U.S. citizen.

Roberto Monti. Mr. Monti is a member of the Company's board of directors and of its audit committee. He is a member of the board of directors of YPF S.A. He has served as vice president of exploration and production of Repsol YPF and as chairman and chief executive officer of YPF. He was also the president of Dowell, a subsidiary of Schlumberger and the president of Schlumberger wire & testing division for East Hemisphere Latin America. Mr. Monti is an Argentine citizen.

Maria Novales-Flamarique. Ms. Novales-Flamarique is a member of the Company's board of directors. She advises multinational institutions on a variety of strategic and transformational issues. Previously, she was country head for Generation Mexico, an NGO founded by McKinsey & Company that transforms education-to-employment systems to prepare, place, and support people into life-changing careers that would otherwise be inaccessible. She was also a partner at McKinsey & Company, leading more than 50 teams advising companies in Mexico, other Latin American countries, the United States and Europe. She began her career in asset management at Letko, Brosseau & Associates in Montreal, Canada, and worked as an investment banker at Citigroup Global Markets in New York City. She currently serves as an independent director at Scotiabank Mexico, where she is a member of the risk and talent committees. She also sits on advisory boards at several fintech, HRtech, insurtech start-ups and venture capital funds. She holds an MBA from London Business School, a B.A. from HEC Montreal and is a CFA Charterholder. Ms. Novales-Flamarique is a Canadian, Spanish, and U.S. citizen.

Gianfelice Mario Rocca. Mr. Rocca is a member of the Company's board of directors. He is a grandson of Agostino Rocca. He is chairman of the board of directors of San Faustin, member of the board of directors of Ternium, president of the Humanitas Group and president of the board of directors of Tenova. Moreover, in Italy, he is member of the board of Bocconi University and of the advisory board of Politecnico di Milano. At international level, he is member of the Harvard Business School Advisory Board and member of the European Round Table of Industrialists ("ERT"). Mr. Rocca is an Italian citizen.

Paolo Rocca. Mr. Rocca is the Chairman of the Company's board of directors and has been our chief executive officer since 2002. He is a grandson of Agostino Rocca. He is also the chairman of the board of directors of Ternium and a director and President of San Faustin. He is a member of the executive committee of the World Steel Association. Mr. Rocca is an Italian citizen.

Jaime José Serra Puche. Mr. Serra Puche is a member of the Company's board of directors and of its audit committee. He is the chairman of SAI Derecho & Economía, a Mexican consulting firm, and a member of the board of directors of the Mexico Fund, Grupo Vitro, and chairman of the board of BBVA. Mr. Serra Puche served as Mexico's Undersecretary of Revenue, Secretary of Trade and Industry, and Secretary of Finance. He led the negotiation and implementation of NAFTA. Mr. Serra Puche is a Mexican citizen.

Monica Tiuba. Ms. Tiuba is a member of the Company's board of directors and chairperson of the audit committee. She is a Brazilian qualified lawyer and accountant with 20 years of professional experience in Brazil and Luxembourg. She started her career at Barbosa, Mussnich & Araújo law firm in Rio de Janeiro, Brazil, where she practiced corporate law, M&A and tax litigation. She worked in EY and PwC, in the Brazil and Luxembourg offices, advising multinational clients, private equity houses and family offices. She gained banking experience working as international senior wealth planner at Banque Edmond de Rothschild, in Luxembourg. She currently serves as member of the board of directors of Investing for Development SICAV, a Luxembourg social impact fund and of its Forest and Climate Change Fund and she is also a member of Freyr Battery's board of directors and chairperson of the audit and risk committee. She holds a Master of Laws in International and Comparative Law at the Vrije Universiteit Brussel, a specialization in EU tax law from Leiden University and a Master of Laws in international taxation from Vienna University of Economics. Ms. Tiuba is a Brazilian and Luxembourgish citizen.

Guillermo Vogel. Mr. Vogel is a member of the Company's board of directors and also holds the position of vice chairman of the board. He is the chairman of G Collado SAB de C.V. and Exportaciones IM Promoción S.A. de C.V., and served during three different periods as president of Cámara Nacional de la Industria del Hierro y el Acero ("CANACERO"), the Steel Chamber in Mexico, where he is currently a member of the Executive Commission. He also served as vice chairman of the board of the American Iron and Steel Institute ("AISI"). Mr. Vogel is also a member of the board of directors of each of Techint, S.A. de C.V., Alfa S.A.B. de C.V., Banco Santander (Mexico) S.A., the Universidad Panamericana – IPADE, Innovare R&D S.A. de C.V and Club de Industriales, A.C. In addition, he is a member of The Trilateral Commission and member of the International Board of The Manhattan School of Music and chairman of the US-Mexico CEO Dialogue. Mr. Vogel is a Mexican citizen.

Board members Ayat, Monti, Novales-Flamarique, Serra Puche and Tiuba qualify as independent directors under the Exchange Act Rule 10A-3(b)(1) and the Company's articles of association.

Directors' Liability

Each director must act in the interest of the Company, and in accordance with applicable laws, regulations, and the Company's articles of association. Directors are also bound by a general duty of care owed to the Company.

Under the Luxembourg law of August 10, 1915, on commercial companies, as amended (the "Luxembourg Company Law"), directors may be liable to the Company in accordance with general law for the execution of their mandate and for any misconduct in the management of the Company's affairs. Directors are jointly and severally liable towards either the Company or any third parties from damages resulting from the violation of the Luxembourg Company Law or the Company's articles of association. Directors shall be discharged from such liability in the case of a violation to which they were not a party provided no misconduct is attributable to them and such violation has been reported to the first general meeting of shareholders after they have acquired knowledge thereof.

Causes of action against directors for damages may be initiated by the Company upon a resolution of the general shareholders' meeting passed by a simple majority vote, irrespective of the number of shares represented at the meeting. Causes of action against directors who misappropriate corporate assets or commit a breach of trust may be brought by any shareholder for personal losses different from those of the Company.

An action may also be brought against the directors on behalf of the Company by shareholders who, at the general meeting which decided to discharge such directors or members, owned voting securities representing at least ten percent of the votes attaching to all such securities.

It is customary in Luxembourg that the shareholders expressly discharge the members of the board of directors from any liability arising out of or in connection with the exercise of their mandate when approving the annual accounts of the Company at the annual general shareholders meeting. However, any such discharge will not release the directors from liability for any damage caused by unrevealed acts of mismanagement or unrevealed breaches of the Luxembourg Company Law or the Company's articles of association, nor will it release directors from liability for any personal loss of the shareholders independent and separate from losses suffered by the Company due to a breach either revealed or unrevealed of the Luxembourg Company Law or the Company's articles of association.

Under Luxembourg law, unless the decision of the board of directors relates to ordinary business entered into under normal conditions, any director having a direct or indirect financial interest conflicting with that of the Company in a transaction which has to be considered by the board of directors, must advise the board thereof and cause a record of her/his statement to be included in the minutes of the meeting and may not take part in the deliberations. At the next following general meeting, before any other resolution is put to vote, a special report must be made on any transactions in which any of the directors may have had an interest conflicting with that of the Company.

Auditors

The Company's articles of association require the appointment of an independent audit firm in accordance with applicable law. The primary responsibility of the auditor is to audit the Company's annual accounts and consolidated financial statements and to submit a report on the accounts to shareholders at the annual shareholders' meeting. In accordance with applicable law, auditors are chosen from among the members of the Luxembourg Institute of Independent Auditors (*Institut des réviseurs d'entreprises*).

Auditors are appointed by the general shareholders' meeting upon recommendation from the Company's audit committee through a resolution passed by a simple majority vote, irrespective of the number of shares represented at the meeting, to serve one-year renewable terms. Auditors may be dismissed for reasonable cause by the general shareholders' meeting at any time. Luxembourg law does not allow directors to serve concurrently as external auditors. As part of their duties, auditors report directly to the audit committee.

Pursuant to its charter, the Company's audit committee is responsible for, among other things, the oversight of the independence and performance of the Company's external auditors. The audit committee is also responsible to consider and make recommendations to the board of directors, to be put to shareholders for approval at the annual general meeting of shareholders, regarding the appointment, re-appointment or removal of the Company's external auditors. In addition, the audit committee is responsible to review the appropriateness and provision of permitted non-audit fees and to review and approve any fees (whether for audit, audit-related and non-audit services) payable to the Company's external auditors. On a yearly basis, in the performance of its functions, the audit committee considers the appointment of the Company's external auditors and reviews, together with management and the external auditor, the audit plan, audit related services and other non-audit services. The audit committee requests the board of directors to submit the audit committee's recommendation for the appointment of the Company's external auditor for each fiscal year and the payment of applicable fees, for final approval by the general shareholders' meeting. The general shareholders' meeting regularly approves audit fees and authorizes the audit committee to approve any increase or reallocation of such audit fees as may be necessary, appropriate or desirable under the circumstances. No services outside the scope of the audit committee's approval can be undertaken by the external auditor.

The shareholders' meeting held on May 3, 2022, re-appointed PwC Luxembourg as the Company's independent approved statutory auditor for the fiscal year ended December 31, 2022. At the next annual general shareholders' meeting scheduled to be held on May 3, 2023, it will be proposed that PwC Luxembourg be re-appointed as the Company's independent approved statutory auditors for the fiscal year ending December 31, 2023, and that Ernst & Young ("EY") be appointed as the Company's external auditors for the fiscal year ending December 31, 2024, following the completion of a tender process for the selection of a replacement audit firm for the year 2024, in response to applicable EU and Luxembourg mandatory auditor rotation rules.

Senior Management

Our current senior management as of the date of this annual report consists of:

Name	Position	Age at December 31, 2022
Mr. Paolo Rocca	Chairman and Chief Executive Officer	70
Ms. Alicia Mondolo ⁽¹⁾	Chief Financial Officer	64
Mr. Antonio Caprera	Chief Industrial Officer	62
Mr. Gabriel Casanova	Chief Supply Chain Officer	64
Mr. Alejandro Lammertyn	Chief Digital and Information Officer	57
Mr. Luis Scartascini	Chief Human Resources Officer	49
Mr. Marcelo Ramos	Chief Technology Officer	59
Mr. Vicente Manjarrez	President, Andean	44
Mr. Luca Zanotti	President, United States	55
Mr. Sergio de la Maza	President, Mexico	66
Mr. Ricardo Prosperi	President, Canada	60
Mr. Renato Catalini	President, Brazil	56
Mr. Javier Martnez Alvarez	President, Southern Cone	56
Mr. Gabriel Podskubka ⁽²⁾	President, Eastern Hemisphere	49
Mr. Michele Della Briotta	President, Europe	50

(1) Effective April 1, 2023, Alicia Mondolo will also be in charge of supervising the Process Improvement & IT department.

(2) Effective April 1, 2023, Gabriel Podskubka will become Tenaris’s chief operating officer.

Paolo Rocca. Mr. Rocca is the Chairman of the Company’s board of directors and has been our chief executive officer since 2002. He is a grandson of Agostino Rocca. He is also the chairman of the board of directors of Ternium and a director and President of San Faustin. He is a member of the executive committee of the World Steel Association. Mr. Rocca is an Italian citizen.

Alicia Mondolo. Ms. Mondolo currently serves as our Chief Financial Officer, a position she took on in August 2019. Ms. Mondolo joined the Techint Group in 1984 and has more than 35 years of experience in accounting and reporting, audit and finance. From 2010 to 2016, she served as Chief Audit Executive of Tenaris. Previously and from 2016 to 2019, she served as financial officer in several companies in the Techint Group. Effective April 1, 2023, Ms. Mondolo will also be in charge of supervising the Process Improvement & IT department. Ms. Mondolo is an Argentine and Italian citizen.

Antonio Caprera. Mr. Caprera currently serves as our Chief Industrial Officer, a position he took on in April 2017. He joined the company in 1990. From 2000 to 2006 he served as quality director at Dalmine in Italy, where he later took on responsibilities as production director until 2012. From that year and until 2015 he served as production director at Siderca in Argentina, after which he took on responsibilities as global industrial coordinator based in Mexico until March 2017. Mr. Caprera is an Italian citizen.

Gabriel Casanova. Mr. Casanova currently serves as our Chief Supply Chain Officer, with responsibility for the execution of all contractual deliveries to customers. After graduating as a marine and mechanical engineer, he joined Siderca’s export department in 1987. In 1995 he became Siderca’s Chief Representative in China and from 1997 to 2009 he held several positions in the commercial area in Dalmine. In 2009 he became the head of our supply chain network and in October 2012 he took on his current position. Mr. Casanova is an Argentine citizen.

Alejandro Lammertyn. Mr. Lammertyn currently serves as our Chief Digital and Information Officer, a position he took in 2020. Mr. Lammertyn began his career with Tenaris in 1990. Previously, he served as assistant to the chief executive officer for marketing, organization and mill allocation, supply chain director, commercial director, Eastern Hemisphere area manager and strategic planning director. Mr. Lammertyn is an Argentine citizen.

Luis Scartascini. Mr. Scartascini currently serves as our Chief Human Resources Officer, a position he took on in January 2022. After receiving a degree in industrial engineering, he started his career in Siderca in 1997 and then moved to Houston in 2003 to be part of the company's commercial office in the United States. In 2005 he moved back to Argentina to serve as the director of the Global Trainee program before heading to Dubai in 2010 to lead the Middle Eastern Business Unit and later support the acquisition of Saudi Steel Pipes. He returned to the United States in 2018 as commercial vice president and played a leading role in the commercial integration of IPSCO. Mr. Scartascini is an Argentine and Italian citizen.

Marcelo Ramos. Mr. Ramos currently serves as our Chief Technology Officer, with responsibility over technology and quality. Previously he served as corporate quality director and managing director of NKK Tubes. He joined the Techint Group in 1987 and has held various positions within Tenaris. He took on his current position in April 2010, when the quality and technology departments were combined. Mr. Ramos is an Argentine citizen.

Vicente Manjarrez. Mr. Manjarrez is currently president of our operations in the Andean Region, Central America and the Caribbean, based in Colombia, a position he took on in September 2019. He began his career at our Tamsa mill in Veracruz, Mexico in 2003 as part of the maintenance team and eventually adopted a leading role in the expansion of the plant in 2009 as manager of the new rolling mill. In 2015 he moved to Romania to lead the technical sales team before returning to Colombia to take on the role of senior commercial director in 2017. Mr. Manjarrez is a Mexican citizen.

Luca Zanotti. Mr. Zanotti currently serves as president of our operations in the United States. In 2002, he joined Exiros, the procurement company for the Techint Group, as planning and administration director. He was later promoted to raw materials director and in July 2007 became managing director of Exiros, a position he held until 2010. He served as regional manager Europe, and managing director of Dalmine from 2011 to 2015, when he took on his current position. Before joining the Techint Group, he was a senior manager at A.T. Kearney in Milan, where he worked from 1998 to 2002, and prior to that he held various business development positions in the Far East for Lovato Electric. Mr. Zanotti is an Italian citizen.

Sergio de la Maza. Mr. de la Maza currently serves as our president, Mexico and also serves as managing director and executive vice-president of Tamsa. He first joined Tamsa in 1980. From 1983 to 1988, Mr. de la Maza worked in several positions in Tamsa. He then became manager of Tamsa's new pipe factory and later served as manufacturing manager and quality director of Tamsa. Subsequently, he was named manufacturing director of Siderca. He took on his current position in 2003. Mr. de la Maza is a Mexican citizen.

Ricardo Prospero. Mr. Prospero has served as president of our operations in Canada since September 2019. He joined the Techint Group in 1985, working in the Siderar planning department. From 1985 to 1998, Mr. Prospero held several positions in Siderar before becoming the exports general manager of Sidor. He later went on to be the commercial director in Siderar. After a period as president of Ternium Sidor in Venezuela and then International Area Manager for Ternium, he joined Tenaris in 2010, where he has served as president of our operations in the Andean Region, Central America and the Caribbean, based in Colombia. Mr. Prospero is an Argentine citizen.

Renato Cattalini. Mr. Cattalini currently serves as president of our operations in Brazil, a position that he took on in October 2012, after having served as our supply chain director since August 2007. He joined Tenaris in 2001 in the supply management area, as a general manager of Exiros Argentina. In July 2002, he was appointed operations director and subsequently, in January 2005, became managing director of Exiros. Before joining Tenaris, he worked for ten years in the energy sector, working for TGN, Nova Gas International, TransCanada Pipelines and TotalFinaElf, among others. Mr. Cattalini is an Argentine and Italian citizen.

Javier Martínez Álvarez. Mr. Martínez Álvarez currently serves as president of our operations in the Southern Cone, a position he took on in June 2010, having previously served as our Andean area manager. He began his career in the Techint Group in 1990, holding several positions including planning manager of Siderar and commercial director of Ternium-Sidor. In 2006, he joined Tenaris as our Venezuela area manager. Mr. Martínez Álvarez is an Argentine citizen.

Gabriel Podskubka. Mr. Podskubka currently serves as president of our operations in the Eastern Hemisphere, based in Dubai. He took on his current position in April 2013 after serving as the head of our operations in Eastern Europe for four years. After graduating as an industrial engineer Mr. Podskubka joined the Techint Group in 1995 in the marketing department of Siderca. He held various positions in the marketing, commercial, and industrial areas until he was appointed as oil & gas sales director in the United States in 2006. Effective April 1, 2023, Mr. Podskubka will become Tenaris's chief operating officer. Mr. Podskubka is an Argentine citizen.

Michele Della Briotta. Mr. Della Briotta currently serves as president of our operations in Europe, a position he took on in July 2016. He first joined Tenaris in 1997 and has worked in areas such as industrial planning, operations, supply chain and commercial in Italy, Mexico, Argentina and the United States. Most recently he served as Tenaris's area manager for Romania. Mr. Della Briotta is an Italian citizen.

Compensation

The compensation payable to the members of the Company's board of directors for the performance of their services to the Company is determined at the annual ordinary general shareholders' meeting. The general meeting of shareholders held on May 3, 2022, approved the compensation paid to directors for the performance of their duties during the fiscal year 2022 and resolved that (i) each director receives a fixed compensation for an amount of \$115,000; (ii) each director who is also a member of the Company's audit committee receives an additional fee of \$55,000; and (iii) the chairperson of the Company's audit committee receives an additional fee of \$10,000. No variable compensation has been paid or shall be payable to directors for services rendered during the year 2022 and no long-term incentive or pension plan is available to directors.

The compensation paid to the Company's managing director or chief executive officer is determined by the board of directors. The cash compensation paid or payable to the chief executive officer for the performance of his duties during the year 2022 amounts to \$9.5 million, of which \$3 million corresponds to fixed compensation and \$6.5 million corresponds to variable compensation. No long-term incentive or pension plan is awarded to the chief executive officer.

The aggregate cash compensation paid to all directors and senior managers of the Company for the year 2022 amounted to \$35.2 million. This amount includes cash benefits paid to certain senior managers in connection with pre-existing retirement plans. In addition, directors and senior managers received for the year 2022, 437 thousand units for a total amount of \$5.1 million in connection with the employee retention and long-term incentive program described in note II.P.3 "Accounting Policies - Employee benefits - Other long-term benefits" to our audited consolidated financial statements included in this annual report.

The Luxembourg Law of August 1, 2019 (amending the Luxembourg Law of May 24, 2011) (the "Shareholders' Rights Law") on the exercise of certain rights of shareholders in general meetings of listed companies, which transposes EU Directive 2017/828 of the European Parliament and of the Council of May 17, 2017 (amending Directive 2007/36/EC) regarding the encouragement of long-term shareholder engagement in listed companies within the Member States of the European Union, requires EU listed companies to adopt a Compensation Policy setting forth the principles and guidelines for purposes of determining the compensation payable to the members of the Company's board of directors and the managing director or chief executive officer and annual Compensation Reports describing the annual compensation paid to directors and the chief executive officer for the performance of their duties.

The Company's board of directors approved, at its meeting held on April 29, 2020, the Compensation Policy of the Company, which was submitted to an advisory non-binding vote at the shareholders meeting held on June 2, 2020, and approved by majority vote. The Compensation Policy is available on the Company's website and will be submitted to the non-binding vote of the shareholders every four years, to the extent required by Luxembourg law, or in the event of a material amendment thereto.

In addition, on March 31, 2023, the Company's board of directors approved the 2022 Compensation Report, which is available on the Company's website and will be submitted to the non-binding vote of the shareholders at the next general meeting of shareholders scheduled to be held on May 3, 2023.

Board Practices

Audit Committee

Pursuant to the Company's articles of association, as supplemented by the audit committee's charter, for as long as the Company's shares are listed on at least one regulated market, the Company must have an audit committee composed of at least three members, the majority of whom must qualify as independent directors, provided, however, that the composition and membership of the audit committee shall satisfy such requirements as are applicable to, and mandatory for, audit committees of issuers such as the Company under any law, rule or regulation applicable to the Company (including, without limitation, the applicable laws, rules and regulations of such regulated market or markets).

Under the Company's articles of association, an independent director is a director who:

- is not and has not been employed by us or our subsidiaries in an executive capacity for the preceding five years;
- is not a person that controls us, directly or indirectly, and is not a member of the board of directors of a company controlling us, directly or indirectly;
- does not have (and is not affiliated with a company or a firm that has) a significant business relationship with us, our subsidiaries or our controlling shareholder;
- is not and has not been affiliated with or employed by a present or former auditor of us, our subsidiaries or our controlling shareholder for the preceding five years; *and*
- is not a spouse, parent, sibling or relative up to the third degree of any of the above persons.

The audit committee of the Company's board of directors currently consists of four members: Mr. Simon Ayat, Mr. Roberto Monti, Mr. Jaime José Serra Puche and Ms. Monica Tiuba, who were appointed to the audit committee by the Company's board of directors on May 3, 2022. As of the date of this annual report, all members of the audit committee qualify as independent directors both for purposes of the Exchange Act Rule 10A-3(b)(1), and under the Company's articles of association. The board of directors of the Company has determined that Ms. Tiuba qualifies as "audit committee financial expert" under applicable SEC rules and has competence in accounting or auditing matters, as required by applicable Luxembourg law. In addition, the membership of the audit committee as a whole has sufficient relevant knowledge of the business and financial experience to properly discharge its functions.

The audit committee operates under a charter amended and restated by the board of directors on October 8, 2021. The audit committee assists the board of directors in its oversight responsibilities relating to (i) the integrity of the Company's financial statements; (ii) the effectiveness of the Company's systems of internal control, risk management and internal audit over financial reporting; and (iii) the independence and performance of the Company's external auditors. The audit committee also performs other duties entrusted to it by the Company's board of directors or required to be performed by it under applicable laws and regulations.

In addition, the audit committee is required to review and, where applicable, approve material transactions between the Company or its subsidiaries and related parties, as provided in the Company's articles of association, or as may be required by any law, rule or regulation applicable to the Company, in order to determine whether their terms are consistent with the interests of the Company and all its shareholders and are consistent with market conditions or are otherwise fair to the Company and its subsidiaries. The Company has adopted a Related Party Transactions Policy and Procedure setting forth the revised, updated and consolidated guidelines and processes through which the Company identifies, approves and manages related party transactions, seeking to assure transparency and substantial and procedural fairness of such transactions, as well as compliance with the provisions in the Company's articles of association and the audit committee charter relating to transactions with related parties, Luxembourg rules relating to the approval and disclosure of material related party transactions, and Section 314.00 of the NYSE Listed Company Manual.

Under the Company's articles of association, as supplemented by the Related Party Transactions Policy and Procedure, a "related party" is any of the following persons: (i) any affiliate of the Company; (ii) any entity in which a controlling person owns a substantial interest or over which a controlling person can exercise significant influence; (iii) any unconsolidated entity in which the Company has significant influence; (iv) any entity or individual having significant influence over the Company, or a close family member of any such individual; (v) any individual or entity that is the beneficial owner of five percent (5%) or more of the shares of the Company, including through the ownership of any securities representing shares of the Company; (vi) any director or executive officer of any of the controlling persons, the Company or any of the subsidiaries, or a close family member of any such director or executive officer; (vii) any entity in which a substantial interest in the voting power is owned, directly or indirectly, by any person described in (iv), (v) or (vi) above or over which such a person is able to exercise significant influence; or (viii) any entity that has a member of key management in common with the Company or any of its subsidiaries (provided that key management personnel includes persons having authority and responsibility for planning, directing and controlling the activities of an entity, including directors and executive officers and close family members of any such individuals).

With respect to the materiality threshold for review and approval of related party transactions, the Company's articles of association, as supplemented by the audit committee's charter and the Related Party Transactions Policy and Procedure, provide that the following related party transactions, which are qualified as "Level 1" related party transactions, are subject to review by the audit committee, which shall make a recommendation to the board of directors as to either reject or approve the proposed related party transaction:

- any transaction between the Company or its subsidiaries with related parties (i) with an individual value equal to or greater than \$10 million, or its equivalent in other currencies, or (ii) with an individual value lower than \$10 million, or its equivalent in other currencies, when the aggregate sum reflected in the financial statements of the four fiscal quarters preceding the date of determination- of any series of transactions for such lower value that can be deemed to be parts of a unique or single transaction (but excluding any transactions that were reviewed and approved by Company’s audit committee or board of directors, as applicable, or the independent members of the board of directors of any of its subsidiaries) exceeds 1.5% of the Company’s consolidated net sales made in the fiscal year preceding the year on which the determination is made; *and*
- any corporate reorganization transaction (including a merger, spin-off or bulk transfer of a business) affecting the Company or any of its subsidiaries for the benefit of, or involving, a related party.

In addition, any related party transaction that does not qualify as a “Level 1” related party transaction, but which has an individual value equal to or higher than \$5 million (which is the value threshold determined by management to be material to the Company for disclosure purposes under “Related Parties Transactions” of this annual report), qualifies as a “Level 2” related party transaction and must be reviewed by the audit committee for purposes of making a determination as to whether any conflicts of interest exist and whether the proposed related party transaction is consistent with the interests of the Company and all shareholders, in order to either reject or approve the proposed transaction. Any related party transaction that is for less than such value qualifies as a “Level 3” related party transaction and is reviewed by the Company’s related-party transaction unit, the area within the Company responsible for centralizing and compiling the information relating to all related party transactions and performing the review, assessment and other procedures contemplated in the Related Party Transactions Policy and Procedure.

The audit committee has the power (to the maximum extent permitted by applicable laws) to request that the Company or relevant subsidiary promptly provide all information necessary for the audit committee to assess the material transactions with related parties that it is required to review. In no event may any proposed related party transaction be entered into or otherwise be given effect unless it has been reviewed and approved in accordance with the Related Party Transactions Policy and Procedure. Any executed transaction that has not been duly reviewed and approved must be promptly submitted for review in accordance with applicable procedures and, if determined appropriate, must be ratified; if the transaction is not ratified, it must be modified to make it acceptable for ratification or it must otherwise be immediately discontinued or rescinded.

The audit committee has the authority to conduct any investigation appropriate to the fulfillment of its responsibilities and has direct access to the Company’s external auditors as well as anyone in the Company and, subject to applicable laws and regulations, its subsidiaries. In addition, the audit committee may engage, at the Company’s expense, independent counsel and other internal or external advisors to review, investigate or otherwise advise on, any matter as the committee may determine to be necessary to carry out its purposes and responsibilities.

In addition, the Company has established a management-level Critical Risk Committee (“CRC”) that assists the Company’s board of directors, the audit committee and the chief executive officer in connection with the monitoring, assessment and review of risks to which Tenaris is exposed and in the oversight of the risk management framework and processes, with a focus on critical risks (including accidents, cybersecurity, commercial execution, environmental, health and safety and regulatory risks), the development of mitigating actions, and the monitoring of action plans. The CRC operates under a Critical Risk Management charter approved by the board of directors on November 1, 2017, which sets forth the roles, composition and responsibilities of the CRC. The CRC assists the board of directors, the audit committee and the chief executive officer with the oversight of the risks to which Tenaris is exposed and monitors the risk management process, including risk mapping, mitigation and prevention, with a focus on critical risks. The CRC periodically reports to the board of directors, the audit committee and the chief executive officer on its activities.

Employees

The following table shows the number of persons employed by Tenaris as of December 31:

	2022	2021	2020
Argentina	6,444	5,169	4,376
Mexico	5,919	5,474	4,501
USA	3,509	2,684	1,596
Italy	2,136	2,011	2,039
Romania	1,847	1,725	1,552
Brazil	1,460	1,817	1,360
Colombia	1,183	1,009	746
Canada	944	758	561
Indonesia	495	506	521
Japan	11	379	399
Other countries	1,344	1,244	1,377
	25,292	22,776	19,028

The ramp-up of activity, particularly in our U.S., Canadian and Argentine operations, following the recovery in demand, has led to a substantial increase in our headcount during the year, with shop-floor employees and technical leaders increasing by more than 2,000 from December 2021 to December 2022, and professional employees increasing by approximately 400 over the same period of time. We reinforced health, safety and environment training to ensure all employees receive training to minimize incidents and accidents while keeping quality and productivity levels high on the production lines.

Our headcount decreased in Japan and Brazil. In Japan, the reduction was caused by the termination of the joint venture agreement with JFE and cease of NKK Tubes' operations in Japan. In Brazil, headcount decreased as a result of the discontinuation of Confab Equipamentos activities in its industrial facility in Moreira César, Pindamonhangaba, São Paulo, Brazil.

Approximately two-thirds of our employees are unionized. In all countries where we have presence, we operate in compliance with applicable rules and regulations. We forge our relations with the unions based on the premise of an open dialogue and a rich interchange of proposals.

Tenaris is committed to leading with care, providing a flexible and agile working environment that encourages health, safety and wellbeing, accountability, inclusion and trust, allowing employees to develop their skills and careers while contributing to our goals.

In terms of human resources our goals are:

- to foster trust and empower employees to manage and promote change and innovation, providing them with the training and technological resources to succeed;
- to embed sustainability values through transparent and effective processes, helping employees shape their professional careers;
- to encourage continuous learning and feedback through concrete tools; *and*
- to respect and promote diversity and inclusion in all its forms, focused on gender, age, culture and background.

The Company's Code of Conduct prohibits unlawful discrimination in employment relationships, granting all people the right to apply for a position in Tenaris, or to be considered for a new position based on merit, without arbitrary discrimination. The Company's Human Resources Policy champions equal opportunities by ensuring that hiring, promotion, transfer, notice periods, dialogue, rights and protection, as well as other employment decisions are taken without regard for race, color, religious belief, gender, age, disability, national origin or sexual orientation. Compensation and remuneration are based on each person's duties, personal performance, competence and behavior. Tenaris pursues a policy of inclusive corporate culture and leadership, recognizing the range of benefits brought by embracing diversity in all its aspects, from gender to nationality and age. Specifically, we are making headway in our drive to improve the gender balance, in the knowledge that tackling the male-dominated traditions prevalent in the steel industry will contribute positively to our performance culture.

Share Ownership

To our knowledge, the total number of shares (in the form of ordinary shares or ADSs) beneficially owned by our directors and senior management as of the date of this annual report was 858,712, which represents 0.07% of our outstanding shares.

The following table provides information regarding share ownership by our directors and senior management:

Director or Officer	Number of Shares Held
Guillermo Vogel	850,446
Carlos Condorelli	4,320
Gabriel Podskubka	3,946
Total	858,712

Major Shareholders and Related Party Transactions

Major Shareholders

The following table shows the beneficial ownership of our securities (in the form of shares or ADSs) by (1) the Company's major shareholders (persons or entities that have notified the Company of holdings in excess of 5% of the Company's share capital), non-affiliated public shareholders, and (2) the Company's directors and senior management as a group. The information below is based on the most recent information provided to the Company.

Identity of Person or Group	Number	Percent
San Faustin ⁽¹⁾	713,605,187	60.45%
Directors and senior management as a group	858,712	0.07%
Public	466,072,931	39.48%
Total	1,180,536,830	100.00%

⁽¹⁾ San Faustin owns all of its shares in the Company through its wholly-owned subsidiary Techint Holdings S.à r.l. The private foundation located in the Netherlands RP STAK holds voting rights in San Faustin sufficient in number to control San Faustin. No person or group of persons controls RP STAK.

The voting rights of the Company's major shareholders do not differ from the voting rights of other shareholders. None of its outstanding shares have any special control rights. The Company's articles of association do not contain any provision that would have the effect of delaying, deferring or preventing a change in control of the Company and that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company or any of its subsidiaries.

The Company does not know of any significant agreements or other arrangements to which the Company is a party and which take effect, alter or terminate in the event of a change of control of the Company. The Company does not know of any arrangements, the operation of which may at a later date result in a change of control of the Company.

Related Party Transactions

Tenaris is a party to several related party transactions as described in note 30 “Related party transactions” to our Consolidated Financial Statements included in this annual report. Material related party transactions are subject to the review of the audit committee of the Company’s board of directors and the requirements of Luxembourg law. For further details on the approval process for related party transactions, see “Directors, Senior Management and Employees – Board Practices – Audit Committee”.

Purchases of Steel Products and Raw Materials

In the ordinary course of business, we purchase round steel bars, flat steel products and other raw materials from Ternium or its subsidiaries. These purchases were made on terms no less favorable to Tenaris than terms that could have been obtained from unrelated third parties. These transactions include:

- Purchases of round steel bars made under a frame agreement for use in our seamless steel pipe operations in Mexico, which amounted to \$111 million in 2022 and \$157 million in 2021.
- Purchases of flat steel products for use in the production of welded pipes and accessories, which amounted to \$101 million in 2022, \$32 million in 2021 and \$13 million in 2020.
- Purchases of scrap and other raw materials for use in the production of seamless pipes, which amounted to \$12 million in 2022, \$9 million in 2021 and \$2 million in 2020.

In the ordinary course of business, we purchase flat steel products from Usiminas for use in our welded steel pipe operations. These purchases, which were made on terms no less favorable to Tenaris than terms have been obtained from unrelated third parties, amounted to \$335 million in 2022, \$27 million in 2021 and \$20 million in 2020.

Sales of Raw Materials

In the ordinary course of business, we sell ferrous scrap and other raw materials to Ternium or its subsidiaries. These sales, which are made on similar terms and conditions as sales to other unrelated third parties, amounted to \$39 million in 2022, \$36 million in 2021 and \$15 million in 2020.

Purchase Agency Services and Sales of Materials

Exiros B.V. (“Exiros”), in which we have 50% share ownership and Ternium owns the remaining 50%, provides purchase agency services and raw materials and other products to various companies controlled by or under the significant influence of San Faustin. Pursuant to the Exiros shareholders’ agreement, Tenaris recognizes Exiros’ assets, liabilities, revenue and expenses in relation to its interest in the joint operation. Exiros’ total sales to companies controlled by or under the significant influence of San Faustin totaled \$140 million in 2022, \$76 million in 2021 and \$9 million in 2020.

Supply of Electric Energy

Techgen, which is currently owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris, operates an electric power plant in Pesquería, Mexico. Ternium and Tenaris currently contract 78% and 22%, respectively, of Techgen’s power capacity. Techgen sells to third parties on behalf of Tenaris the unused electricity that Tenaris purchased from Techgen.

Techgen net sales of electricity to Tenaris amounted to \$102 million in 2022, \$70 million in 2021 and \$48 million in 2020.

Supply of Natural Gas

We are party to contracts with Tecpetrol relating to the supply of natural gas to our operations in Argentina. Tecpetrol is a company controlled by San Faustin, engaged in oil and gas exploration and production and has rights to various oil and gas fields in Argentina and elsewhere in Latin America.

Tecpetrol supplies Tenaris’s Argentine subsidiaries with natural gas requirements under market conditions and according to local regulations. Tecpetrol’s sales to Tenaris amounted to \$44 million in 2022, \$32 million in 2021 and \$12 million in 2020.

Provision of Engineering and Labor Services

Tenaris contracts with certain companies controlled by San Faustin specialized in supplying engineering services and non-specialist manual labor services, such as industrial cleaning, general maintenance, handling of by-products and construction services. Fees accrued for these services in the aggregate amounted to \$28 million in 2022, \$7 million in 2021 and \$13 million in 2020.

Sales of Steel Pipes and Sucker Rods

In the ordinary course of business, we sell steel pipes, sucker rods and related services to other companies controlled by or under the significant influence of San Faustin. These sales, which are made principally to companies involved in the construction of gas pipelines and to Tecpetrol and joint ventures in which Tecpetrol participates, for its oil and gas drilling operations, are made on similar terms and conditions as sales to unrelated third parties. Our sales of steel pipes and sucker rods as well as logistical and certain other services to other companies controlled by or under the significant influence of San Faustin amounted to \$149 million in 2022, \$77 million in 2021 and \$22 million in 2020.

Sales of Fracking and Coiled Tubing Services

We provide fracking and coiled tubing services to Tecpetrol and joint ventures in which Tecpetrol participates, for its oil and gas drilling operations, which amounted to \$102 million in 2022 and \$45 million in 2021.

Administrative Services, Legal and Other Support Services

Finma S.A. (“Finma”), a company controlled by San Faustin in which Tenaris has a 33% interest and other affiliates of San Faustin own the remaining shares, provides administrative and legal support services to San Faustin’s affiliates in Argentina, including Tenaris. Fees accrued for these services amounted to \$14 million in 2022, \$10 million in 2021 and \$7 million in 2020.

Loans to Related Parties

Tenaris financed the construction and operation of Techgen’s Pesquería project primarily in the form of subordinated loans to Techgen. Outstanding principal amount of loans to Techgen as of December 31, 2022, 2021 and 2020 amounted to \$58 million. These loans generated interest gains in favor of Tenaris in an amount of \$4 million in 2022 and \$3 million in 2021 and 2020.

Other Transactions

We entered into various contracts with Tenova (and subsidiaries), a company controlled by San Faustin, for the provision of furnaces, spare parts, accessories and related services for our facilities. Supplies received amounted to \$8 million in 2022 and \$1 million in 2021.

In addition, in the ordinary course of business, from time to time, we carry out other transactions and enter into other arrangements with other related parties, including natural gas transport services, rental services related to the supply of coiled tubing services and information technology services, none of which are considered to be material.

Financial Information

Consolidated Statements and Other Financial Information

See “Financial Statements” and pages F-1 through F-77 for our audited consolidated financial statements.

Legal Proceedings

Tenaris is from time to time subject to various claims, lawsuits and other legal proceedings, including customer, employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings, the Company is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, the Company has not accrued a provision for the potential outcome of these cases.

If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, the Company was able to make a reliable estimate of the expected loss or range of probable loss and, depending on the likelihood of occurrence, in some of such cases has accrued a provision for such loss but believes that publication of this information on a case-by-case basis would seriously prejudice the Company’s position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency but has not disclosed its estimate of the range of potential loss.

The Company believes that the aggregate provisions recorded for potential losses in its consolidated financial statements (see notes 23 “Non-current allowances and provisions” and 24 “Current allowances and provisions” to our audited consolidated financial statements included in this annual report) are adequate based upon currently available information. However, if management’s estimates prove incorrect, current reserves could be inadequate and the Company could incur a charge to earnings which could have a material adverse effect on its results of operations, financial condition, net worth and cash flows.

Material Legal Proceedings

Below is a summary description of Tenaris’s material legal proceedings for the year ended December 31, 2022. In addition, Tenaris is subject to other legal proceedings, none of which is believed to be material.

- ***CSN claims relating to the January 2012 acquisition of Usiminas***

Confab, a Brazilian subsidiary of the Company, is one of the defendants in a lawsuit filed in Brazil by Companhia Siderúrgica Nacional (“CSN”) and various entities affiliated with CSN against Confab and several Ternium subsidiaries that acquired a participation in Usiminas’ control group in January 2012.

The CSN lawsuit alleges that, under applicable Brazilian laws and rules, the acquirers were required to launch a tag-along tender offer to all non-controlling holders of Usiminas’ ordinary shares for a price per share equal to 80% of the price per share paid in such acquisition, or BRL28.8, and seeks an order to compel the acquirers to launch an offer at that price plus interest. If so ordered, the offer would need to be made to 182,609,851 ordinary shares of Usiminas not belonging to Usiminas’ control group, and Confab would have a 17.9% share in that offer.

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals maintained the understanding of the first instance court. On August 18, 2017, CSN filed an appeal to the Superior Court of Justice seeking the review and reversal of the decision issued by the Court of Appeals. On March 5, 2018, the court of appeals ruled that CSN’s appeal did not meet the requirements for submission to the Superior Court of Justice and rejected the appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected it and ordered that the case be submitted to the Superior Court of Justice. On September 10, 2019, the Superior Court of Justice declared CSN’s appeal admissible. On March 7, 2023, the Superior Court of Justice, by majority vote, rejected CSN’s appeal. Plaintiffs may still appeal against the Superior Court of Justice’s decision. At this time, the Company cannot predict whether CSN will appeal against the decision and, if appealed, the ultimate resolution of the matter.

The Company continues to believe that all of CSN’s claims and allegations are groundless and without merit, as confirmed by several opinions of Brazilian legal counsel, two decisions issued by the Brazilian securities regulator (“CVM”) in February 2012 and December 2016, the first and second instance court decisions and the March 2023 decision of the Superior Court of Justice referred to above.

- ***Veracel cellulose accident litigation***

On September 21, 2007, an accident occurred in the premises of Veracel Celulose S.A. (“Veracel”) in connection with a rupture in one of the tanks used in an evaporation system manufactured by Confab. The Veracel accident allegedly resulted in material damages to Veracel. Itaú Seguros S.A. (“Itaú”), Veracel’s insurer at the time of the Veracel accident and then replaced by Chubb Seguros Brasil S/A (“Chubb”), initiated a lawsuit against Confab seeking reimbursement of damages paid to Veracel in connection with the Veracel accident. Veracel initiated a second lawsuit against Confab seeking reimbursement of the amount paid as insurance deductible with respect to the Veracel accident and other amounts not covered by insurance. Itaú and Veracel claimed that the Veracel accident was caused by failures and defects attributable to the evaporation system manufactured by Confab. Confab believes that the Veracel accident was caused by the improper handling by Veracel’s personnel of the equipment supplied by Confab in violation of Confab’s instructions. The two lawsuits were consolidated and are considered by the 6th Civil Court of São Caetano do Sul. However, each lawsuit will be adjudicated separately.

On September 28, 2018, Confab and Chubb entered into a settlement agreement pursuant to which on October 9, 2018, Confab paid an amount of approximately \$3.5 million to Chubb, without assuming any liability for the accident or the claim.

On October 10, 2018, Confab was notified that the court had issued rulings for both lawsuits. Both decisions were unfavorable to Confab:

- With respect to Chubb's claim, the court subsequently homologated the above-mentioned settlement and, accordingly, the claim was finalized.
- With respect to Veracel's claim, Confab was ordered to pay the insurance deductible and other concepts not covered by insurance, currently estimated to amount to BRL91.9 million (approximately \$17.4 million) including interest, fees and expenses. Both parties filed motions for clarification against the court's decision, which were partially granted. Although the contract between Confab and Veracel expressly provided that Confab would not be liable for damages arising from lost profits, the court award would appear to include BRL78.8 million (approximately \$15.10 million) of damages arising therefrom. Confab has additional defense arguments in respect of a claim for lost profits. On December 18, 2018, Confab filed an appeal against the first instance court decision, and on April 30, 2019, Veracel filed its response to the appeal. In June 2022, the court resolved that it lacked jurisdiction to decide on the appeal, which was re-allocated to another court. The parties are currently waiting for the trial of the appeal to be scheduled. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.
- ***Petrobras-related proceedings and claims***

The Company is aware that Brazilian, Italian and Swiss authorities investigated whether certain payments were made prior to 2014 from accounts of entities presumably associated with affiliates of the Company to accounts allegedly linked to individuals related to *Petróleo Brasileiro S.A.* ("Petrobras") and whether any such payments were intended to benefit the Company's Brazilian subsidiary Confab.

Upon learning of the investigation, the audit committee of the Company's board of directors engaged external counsel in connection with the Company's review of these matters. In addition, the Company voluntarily notified the SEC and the DOJ in October 2016. The Company conducted, with the assistance of external counsel, an internal investigation and found no evidence corroborating any involvement by the Company or its directors, officers or employees in respect of improper payments. An internal investigation commissioned by Petrobras also found no evidence that Confab obtained any unfair commercial benefit or advantage from Petrobras in return for payments, including improperly obtained contracts. On June 2, 2022, the Company resolved the investigation by the SEC, and the DOJ informed that it had closed its parallel inquiry without taking action. Under the settlement with the SEC, the Company neither admits nor denies the SEC's findings and on June 24, 2022, paid \$53.1 million in disgorgement and prejudgment interest and \$25 million for a civil penalty to conclude the matter.

In July 2019, the Company learned that the public prosecutors' office of Milan, Italy, had completed a preliminary investigation into the same alleged payments and had included in the investigation, among other persons, the Company's chairman and chief executive officer, two other board members, Gianfelice Rocca and Roberto Bonatti, and the Company's controlling shareholder, San Faustin. The Company is not a party to the proceedings. On March 22, 2022, upon completion of the evidentiary phase of the trial, the acting prosecutor requested the first-instance court in Milan in charge of the case to impose sanctions on the Company's chairman and chief executive officer, on the other two board members, and on San Faustin. The Company's outside counsel in Italy advised the Company that neither the case file nor the prosecutor's request contain or identify any evidence of involvement in, or knowledge of, the alleged wrongdoing by any of the three directors. On May 26, 2022, the first-instance court dismissed the case brought by the public prosecutor against the defendants for lack of jurisdiction and stated that the criminal proceeding should not have been initiated. On October 7, 2022, the public prosecutor filed an appeal against the first-instance court's decision.

In June 2020, the Brazilian public prosecutors' office requested the indictment of several individuals, including three executives or former executives of Confab and a former agent of Confab, charging them with the alleged crimes of corruption in relation to contracts executed between 2007 and 2010, and money laundering in relation to payments between 2009 and 2013. These criminal proceedings are underway. Neither the Company nor Confab is a party to these criminal proceedings.

In addition, Petrobras and the Brazilian public prosecutors filed civil claims for damages against, among others, Confab and the Confab executives named in the criminal proceedings referred to above. Confab became aware of these civil claims in September 2022. As of December 31, 2022, the aggregate amount of these claims was estimated at BRL284.2 million (or approximately \$54.5 million). The plaintiffs also seek that Confab be prohibited from contracting with, or receiving benefits or exemptions from, the Brazilian state for an unspecified term. Confab believes these claims do not address either the defense arguments or the evidence available to the plaintiffs in Brazil and presented in other jurisdictions and is vigorously contesting them. At this stage, the Company cannot predict the outcome of these civil proceedings.

- ***Putative class actions***

Following the Company's November 27, 2018, announcement that its Chairman and CEO Paolo Rocca had been included in an Argentine court investigation known as the Notebooks Case (a decision subsequently reversed by a higher court), two putative class action complaints were filed in the U.S. District Court for the Eastern District of New York. On April 29, 2019, the court consolidated the complaints into a single case, captioned "In re Tenaris S.A. Securities Litigation", and appointed lead plaintiffs and lead counsel. On July 19, 2019, the lead plaintiffs filed an amended complaint purportedly on behalf of purchasers of Tenaris securities during the putative class period of May 1, 2014, through December 5, 2018. The individual defendants named in the complaint are Tenaris's Chairman and CEO and Tenaris's former CFO. The complaint alleges that during the class period, the Company and the individual defendants inflated the Tenaris share price by failing to disclose that the nationalization proceeds received by Ternium (in which the Company held an 11.46% stake) when Sidor was expropriated by Venezuela were received or expedited as a result of allegedly improper payments made to Argentine officials. The complaint does not specify the damages that plaintiff is seeking. On October 9, 2020, the court granted in part and denied in part the defendants' motions to dismiss. The court partially granted and partially denied the motion to dismiss the claims against the Company and its Chairman and CEO. In addition, the court granted the motions to dismiss as to all claims against San Faustin, Techint, and Tenaris's former CFO. On November 11, 2022, the parties filed a joint notice of settlement announcing a settlement in principle of all claims in the action, subject to finalizing the settlement agreements and court approval. The parties' agreement in principle provides that, in exchange for dismissal of the action and customary releases from class members and with no admission of liability by Tenaris or Mr. Rocca, Tenaris will pay to the class \$9.5 million (inclusive of legal fees to lead plaintiff's counsel). On March 10, 2023, the lead plaintiffs filed a motion for preliminary approval of the class settlement.

- ***Administrative proceeding concerning Brazilian tax credits***

Confab is a party to an administrative proceeding concerning the recognition and transfer of tax credits for an amount allegedly exceeding the amount that Confab would have been entitled to recognize and / or transfer. The proceeding resulted in the imposition of a fine against Confab representing approximately 75% of the allegedly undue credits, which was appealed by Confab. On January 21, 2019, Confab was notified of an administrative decision denying Confab's appeal, thereby upholding the tax determination and the fine against Confab. On January 28, 2019, Confab challenged such administrative decision and is currently awaiting a resolution. In case of an unfavorable resolution, Confab may appeal before the courts. The estimated amount of this claim is BRL59.2 million (approximately \$11.3 million). At this stage, the Company cannot predict the outcome of this claim.

- ***U.S. patent infringement litigation***

Tenaris Coiled Tubes, LLC ("TCT"), a U.S. subsidiary of the Company, was sued in 2017 by its competitor Global Tubing, alleging defamatory conduct by TCT and seeking a declaration that certain Global Tubing products do not infringe patents held by TCT. TCT counterclaimed that certain Global Tubing products did infringe patents held by TCT, and Global Tubing has since sought to invalidate such patents. On December 13, 2019, Global Tubing filed an amended complaint (including the Company as defendant), alleging, among other things, that TCT and the Company had misled the patent office. On March 20, 2023, the judge granted summary judgment in favor of Global Tubing, concluding that the patents at issue are unenforceable due to inequitable conduct during the patent prosecution process. TCT and the Company are analyzing whether to appeal this judgment. Although it is not possible to predict the final outcome of this matter, the Company believes that any potential losses arising from this case will not be material.

- ***U.S. Antidumping Duty and Countervailing Duty Investigations***

On October 27, 2021, the DOC announced the initiation of antidumping duty investigations of OCTG from Argentina, Mexico, and Russia and countervailing duty investigations of OCTG from Russia and South Korea. The investigations were initiated on the basis of a petition by U.S. Steel Tubular Products, Inc., a small number of other U.S. domestic welded OCTG producers, and a steelworkers' union. On November 22, 2021, the ITC made a preliminary determination of injury, allowing the investigations to proceed. Subsequently, the DOC issued affirmative preliminary and final antidumping determinations with respect to imports from Argentina, Mexico and Russia, and final affirmative countervailing duty determinations with respect to imports from Russia and from some Korean exporters. On October 27, 2022, the ITC determined that the imports under investigation caused injury to the U.S. OCTG industry, bringing the investigation phase to a conclusion. Tenaris and other parties have appealed the agency determinations from the investigation to the Court of International Trade. As a result of the investigation, and unless overturned on appeal, Tenaris is required to pay antidumping duty deposits (at a rate of 78.30% for imports from Argentina and 44.93% for imports from Mexico) until such time the imports are reviewed by the DOC to determine whether final duties are necessary for the specific period under review. Tenaris has been paying such deposits since May 11, 2022, reflecting the amount of such deposits in its costs. The deposit rates may be reset periodically based on the results of the review process. It is possible that, through the periodic review process, the deposits may be either returned to Tenaris in whole or in part, or may be increased.

Dividend Policy

The Company does not have, and has no current plans to establish, a formal dividend policy governing the amount and payment of dividends or other distributions. For a description of the shareholders' and holders of ADS' rights to receive dividends and the conditions to declare and pay dividends, please refer to "Corporate Governance Statement – Corporate Governance".

The following table shows the dividends approved by the Company's shareholders in the last five years:

Shareholders' meeting date	Approved dividend			Dividend payment date	
	Amount (USD million)	Per share (USD)	Per ADS (USD)	Interim Dividend	Dividend Balance
May 2, 2018	484	0.41	0.82	November 2017	May 2018
May 6, 2019	484	0.41	0.82	November 2018	May 2019
June 2, 2020	153	0.13	0.26	November 2019	N/A
May 3, 2021	248	0.21	0.42	November 2020	May 2021
May 3, 2022	484	0.41	0.82	November 2021	May 2022

On February 15, 2023, the Company's board of directors proposed, for the approval of the annual general shareholders' meeting scheduled to be held on May 3, 2023, the payment of an annual dividend of \$0.51 per share (\$1.02 per ADS), or approximately \$602 million, which includes the interim dividend of \$0.17 per share (\$0.34 per ADS) or approximately \$201 million, paid on November 23, 2022. If the annual dividend is approved by the shareholders, a dividend of \$0.34 per share (\$0.68 per ADS), or approximately \$401 million will be paid on May 24, 2023, with an ex-dividend date of May 22, 2023.

Significant Changes

Tenaris to increase its participation in Usiminas control group

On March 30, 2023, the Company's subsidiary, Confab, together with Tenaris's affiliates Ternium Investments and Ternium Argentina, all of which compose the T/T Group within Usiminas control group, entered into a share purchase agreement to acquire from the NSC Group, pro rata to their current participations in the T/T Group, 68.7 million ordinary shares of Usiminas at a price of BRL10 (approximately \$1.9) per ordinary share. Pursuant to the transaction, Tenaris would pay approximately BRL 110 million (approximately \$21 million) in cash for 11 million ordinary shares, increasing its participation in the Usiminas control group to 9.8%. Upon the closing of this transaction, the T/T Group will hold an aggregate participation of 61.3% in the control group, with the NSC Group and Previdência Usiminas (Usiminas employees' pension fund) holding 31.7% and 7.1%, respectively. The transaction is subject to approval by Brazil's antitrust authorities and will be financed with cash on hand.

At closing, the existing Usiminas shareholders agreement will be replaced by a new shareholders agreement setting forth a new governance structure for Usiminas. The T/T Group will nominate a majority of the Usiminas board of directors, the chief executive officer and four other members of the Usiminas board of officers. Of the positions allocated to the T/T Group, Tenaris will retain the right to nominate one member of the Usiminas board of directors and one member of the Usiminas board of officers. Ordinary decisions may be approved with a 55% majority of Usiminas' control group shares.

At any time after the second anniversary of the closing of the transaction, the T/T Group will have the right to buy the NSC Group's remaining interest in the Usiminas control group (153.1 million ordinary shares) at the higher of BRL10 per share and the 40-trading day average price per share immediately prior to the date of exercising the option. In addition, the NSC Group will have the right, at any time after the closing of the transaction, to withdraw its remaining shares from the control group and sell them in the open market after giving the T/T Group the opportunity to buy them at the 40-trading day average price per share, as well as the right, at any time after the second anniversary of the closing, to sell such shares to the T/T Group at BRL10 per share. Confab will have the right to participate in each such transaction pro rata to its current participation in the T/T Group.

For information on the accounting treatment of this transaction, see note 39 "Update as of March 31, 2023 - *Tenaris to increase its participation in Usiminas control group*" to our consolidated financial statements included in this Annual Report.

The Offer and Listing

Offer and Listing Details

The shares are listed on the Mexican Stock Exchange and its ADSs are listed on the NYSE under the symbol "TS". The shares are also listed on the Italian Stock Exchange under the symbol "TEN". Trading on the NYSE and the Mexican Stock Exchange began on December 16, 2002, and trading on the Italian Stock Exchange began on December 17, 2002.

As of February 28, 2023, a total of 1,180,536,830 shares were registered in the Company's shareholder register. As of February 28, 2023, a total of 124,557,770 shares were registered in the name of the Depository for the Company's ADS program.

Additional Information

Exchange Controls

Many of the countries that are important markets for us or in which we have substantial assets have histories of substantial government intervention in currency markets, volatile exchange rates and government-imposed currency controls. These include mainly Argentina, Brazil, Indonesia, Mexico, Nigeria and Romania.

The Argentine peso was subject to a devaluation of approximately 73% against the U.S. dollar during 2022. The Argentine authorities have implemented several measures to reduce volatility in the exchange rate between the ARS and the USD and have implemented formal and informal restrictions on capital inflows into Argentina and capital outflows from Argentina. Certain foreign exchange restrictions are currently in place. As a result, Tenaris's Argentine subsidiaries are currently required to repatriate to Argentina all proceeds for exports of goods (including U.S. dollars received through advance payments and pre-financing facilities) and services and convert such proceeds into Argentine pesos at the applicable exchange rate as of the repatriation date. Access to the Argentine foreign exchange market, either to purchase foreign currency or to transfer foreign currency abroad (including to make import payments, to repay foreign financial indebtedness, to pay services or dividends abroad, and for foreign currency-savings by individuals and/or any other purchase or transfer of foreign exchange) is subject to certain conditions, including extended payment terms from foreign suppliers. Prior approval from the Argentine central bank, which is rarely (if ever) granted, is required to purchase foreign currency to pay dividends to foreign shareholders and to make other payments to affiliates or third parties abroad. Throughout 2022, the Argentine central bank has continued to impose foreign exchange restrictions aimed at limiting the purchase of foreign currency and the Argentine Securities Commission imposed further restrictions to the sale of bonds by Argentine companies against foreign currency.

As of December 31, 2022, the total net equity of Argentine subsidiaries represented approximately 11% of Tenaris's total equity.

For additional information regarding factors affecting the Argentine economy, see "Key Information – Risk Factors – Risks Relating to our Business and Industry – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition". For additional information on current foreign exchange restrictions in Argentina, see note 28 "Foreign exchange control measures in Argentina" of our audited consolidated financial statements included in this annual report.

Taxation

The following discussion of the material Luxembourg and U.S. federal income tax consequences of an investment in our shares and ADSs is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This discussion does not address all possible tax consequences relating to an investment in our shares or ADSs, including the tax consequences under U.S. state and local tax laws.

Grand Duchy of Luxembourg

This section describes the material Luxembourg tax consequences of owning or disposing of shares or ADSs.

It is not intended to be, nor should it be construed to be, legal or tax advice. You should, therefore, consult your own tax advisor regarding local or foreign tax consequences, including Luxembourg tax consequences of owning and disposing of shares or ADSs in your particular circumstances.

As used herein, a "Luxembourg individual" means an individual resident in Luxembourg who is subject to personal income tax (impôt sur le revenu) on his or her worldwide income from Luxembourg or foreign sources, and a "Luxembourg corporate holder" means a company (that is, a fully taxable collectivité within the meaning of Article 159 of the Luxembourg Income Tax Law) resident in Luxembourg subject to Luxembourg corporate income tax (impôt sur le revenu des collectivités) and Luxembourg municipal business tax (impôt commercial communal) on its worldwide income from Luxembourg or foreign sources. For the purposes of this summary, Luxembourg individuals and Luxembourg corporate holders are collectively referred to as "Luxembourg Holders". A "non-Luxembourg Holder" means any investor in shares or ADSs of the Company other than a Luxembourg Holder.

Corporate Reorganization

The Company was established as a Luxembourg *société anonyme* holding under Luxembourg's 1929 holding company regime. Until termination of such regime on December 31, 2010, holding companies incorporated under the 1929 regime (including the Company) were exempt from Luxembourg corporate income tax, Luxembourg municipal business tax, Luxembourg net wealth tax and Luxembourg withholding tax over dividends distributed to shareholders.

On January 1, 2011, the Company became an ordinary public limited liability company (*société anonyme*) and, effective as from that date, the Company is subject to all applicable Luxembourg taxes, (including, among others, Luxembourg corporate income tax on its worldwide income).

In light of the impending termination of Luxembourg's 1929 holding company regime, in the fourth quarter of 2010, the Company carried out a multi-step corporate reorganization, which included, among other transactions, the contribution of most of the Company's assets and liabilities to a wholly-owned, newly-incorporated Luxembourg subsidiary and the restructuring of indirect holdings in certain subsidiaries. The first phase of the corporate reorganization was completed in December 2010 and resulted in a non-taxable revaluation of the accounting value (under Luxembourg GAAP) of the Company's assets. The second phase of the reorganization was completed in 2011.

Following the completion of the first phase of the corporate reorganization, and upon its conversion into an ordinary Luxembourg holding company, the Company recorded a special reserve in its tax balance sheet. Dividend distributions for the foreseeable future will be charged to the special reserve and therefore should not be subject to Luxembourg withholding tax.

Tax regime applicable to realized capital gains

Luxembourg Holders

Luxembourg resident individual holders

Capital gains realized by Luxembourg resident individuals who do not hold their shares or ADSs as part of a trade or business (i.e. capital gains on private assets) and who hold (together, directly or indirectly, with his or her spouse or civil partner and underage children) no more than 10% of the share capital of the Company, at any time during the five-year period preceding the disposition will only be taxable (at a progressive rate) if they are realized on a sale of shares or ADSs that takes place before their acquisition or within the first six months following their acquisition (i.e. speculative gain). After the six-month period, capital gains are not taxed unless the resident individual holds (together, directly or indirectly, with his or her spouse or civil partner and underage children) more than 10% of the share capital of the Company at any time during the five-year period preceding the disposition.

If such shares or ADSs are held as part of a commercial or industrial business, capital gains would be taxable in the same manner as income from such business.

Capital gains realized by Luxembourg resident individuals holding (alone or together with the resident's spouse or civil partner and underage children) directly or indirectly more than 10% of the capital of the Company at any time during the five years prior to the sale, (or if the Luxembourg resident individuals have received the shares for no consideration within the last five years and the former holder held at least 10% in the capital of the company at any moment during said five years) will be taxable at half of the individual's applicable global tax rate (as determined progressively), if a holding period of six months following their acquisition elapsed (21% for 2022). Within the six-month period, progressive income tax rates apply (ranging from 0 to 42%⁷ in 2022).

Luxembourg resident corporate holders

Capital gains, including currency exchange gains, realized upon the disposal of shares or ADSs by a fully taxable resident corporate holder will in principle be subject to Luxembourg corporate income tax and Luxembourg municipal business tax. The combined applicable rate (including an unemployment fund contribution) for a corporate holder established in Luxembourg-City is 24.94% for the fiscal year ending 2022. An exemption from such taxes may be available to the Luxembourg resident corporate holder pursuant to Article 1 of the Grand Ducal Decree dated December 21, 2001 as amended, in combination with article 166 of the Luxembourg Income Tax Law subject to the fulfillment of the conditions set forth therein.

⁷ A 7% surcharge for the Employment Fund applies on the income tax due. The surcharge for the Employment Fund amounts to 9% for taxpayer in tax class 1 or 1a with taxable income exceeding EUR 150,000 (EUR 300,000 for taxpayer in tax class 2).

Non-Luxembourg Holders

Non-Luxembourg individual holders

An individual who is a non-Luxembourg holder of shares or ADSs (and who does not have a permanent establishment, a permanent representative or a fixed place of business in Luxembourg) will only be subject to Luxembourg taxation on capital gains arising upon disposal of such shares or ADSs if such holder has (alone or together with his or her spouse, civil partner and underage children) directly or indirectly held more than 10% of the capital of the Company at any time during the past five years preceding the disposal, and either (i) such non-Luxembourg holder has been a resident of Luxembourg for tax purposes for at least 15 years and has become a non-resident within the last five years preceding the realization of the gain, subject to any applicable tax treaty, or (ii) the disposal of shares or ADSs occurs within six months from their acquisition (or prior to their actual acquisition), subject, however, to any applicable tax treaty.

Non-Luxembourg corporate holders

A corporate non-Luxembourg holder (that is, a *collectivité* within the meaning of Article 159 of the Luxembourg Income Tax Law), which has a permanent establishment, a permanent representative or a fixed place of business in Luxembourg to which shares or ADSs are attributable, will bear Luxembourg corporate income tax and Luxembourg municipal business tax on a gain realized on a disposal of such shares or ADSs as set forth above for a Luxembourg corporate holder. However, capital gains, including currency exchange gains, realized on the sale of the shares or ADSs may benefit from the full exemption provided for by Article 1 of the Grand Ducal Decree dated December 21, 2001 as amended, in combination with Article 166 of the Luxembourg Income Tax Law subject in each case to fulfillment of the conditions set out therein.

A corporate non-Luxembourg holder, which has no permanent establishment, permanent representative or fixed place of business in Luxembourg to which the shares or ADSs are attributable, will bear non-resident capital gains tax on a gain realized on a disposal of such shares or ADSs under the same conditions applicable to an individual non-Luxembourg holder, as set out above.

Tax regime applicable to distributions

Withholding tax

Distributions to holders are in principle subject to a 15% Luxembourg withholding tax computed on the gross amount distributed. The rate of the withholding tax may be reduced pursuant to double tax treaties existing between Luxembourg and the country of residence of the relevant holder, subject to the fulfillment of the conditions set forth therein. However, distributions imputed for tax purposes to the special reserve (please see above paragraph “corporate reorganization”) should be exempt from Luxembourg withholding tax under the current tax law.

Nevertheless, a withholding tax exemption may apply if the distribution is made to (as far as relevant in the case at hand):

- a Luxembourg resident corporate holder (that is, a fully taxable *collectivité* within the meaning of article 159 of the Luxembourg Income Tax Law);
- an undertaking of collective character which is resident of a Member State of the European Union and is referred to by article 2 of the EU Council Directive of November 30, 2011 concerning the common fiscal regime applicable to parent and subsidiary companies of different member states (2011/96/UE) as amended, (subject to the general anti-abuse rule provided for by Council Directive 2015/121/EU as implemented into Luxembourg law);
- a capital company or a cooperative company resident in Norway, Iceland or Liechtenstein and subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law;
- a capital company resident in Switzerland which is subject to corporate income tax in Switzerland without benefiting from an exemption;
- an undertaking with a collective character subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law which is resident in a country that has concluded a double tax treaty with Luxembourg; *and*
- a Luxembourg permanent establishment of one of the above-mentioned categories, provided each time that at the date of payment, the holder holds or commits to hold directly (or through a company regarded as tax transparent from a Luxembourg tax perspective), during an uninterrupted period of at least twelve months, shares or ADSs representing at least 10% of the share capital of the Company or acquired for an acquisition price of at least EUR 1,200,000.

Luxembourg Holders

With the exception of Luxembourg corporate holders benefiting from the exemption referred to above, Luxembourg individual holders, and Luxembourg corporate holders fully subject to Luxembourg corporate tax, must include the distributions paid on the shares or ADSs in their taxable income, 50% of the amount of such dividends being exempt from tax. The applicable withholding tax can, under certain conditions, entitle the relevant Luxembourg Holder to a tax credit.

Non-Luxembourg Holders

Non-Luxembourg Holders of shares or ADSs and who do not have a permanent establishment, a permanent representative or a fixed place of business in Luxembourg to which the shares or ADSs would be attributable are not liable for any Luxembourg tax on dividends paid on the shares or ADSs, other than a potential withholding tax as described above.

Net wealth tax

Luxembourg Holders

Luxembourg net wealth tax will not be levied on a Luxembourg holder with respect to the shares or ADSs held unless (i) the Luxembourg holder is a legal entity subject to net wealth tax in Luxembourg; or (ii) the shares or ADSs are attributable to an enterprise or part thereof which is carried on through a permanent establishment, a fixed place of business or a permanent representative in Luxembourg.

Net wealth tax is levied annually at the rate of 0.5% for taxable net wealth not exceeding EUR 500,000,000 and at a rate of 0.05% for the net wealth exceeding EUR 500,000,000, of enterprises resident in Luxembourg, as determined for net wealth tax purposes. The shares or ADSs may be exempt from net wealth tax subject to the conditions set forth by Paragraph 60 of the Luxembourg Law of October 16, 1934 on the valuation of assets (*Bewertungsgesetz*), as amended.

A minimum net wealth tax charge applies as of January 1, 2016 for all corporate entities having their statutory seat or central administration in Luxembourg. Subject to certain conditions, the amount of minimum net wealth tax may vary.

Non-Luxembourg Holders

Luxembourg net wealth tax will not be levied on a non-Luxembourg holder with respect to the shares or ADSs held unless the shares or ADSs are attributable to an enterprise or part thereof which is carried on through a permanent establishment or a permanent representative in Luxembourg. The shares or ADSs may be exempt from net wealth tax subject to the conditions set forth by Paragraph 60 of the Luxembourg Law of October 16, 1934 on the valuation of assets (*Bewertungsgesetz*), as amended.

Stamp and registration taxes

No registration tax or stamp duty will be payable by a holder of shares or ADSs in Luxembourg solely upon the disposal of shares or ADSs by sale or exchange.

Estate and gift taxes

No estate or inheritance tax is levied on the transfer of shares or ADSs upon the death of a holder of shares or ADSs in cases where the deceased was not a resident of Luxembourg for inheritance tax purposes and no gift tax is levied upon a gift of shares or ADSs if the gift is not passed before a Luxembourg notary or recorded in a deed registered in Luxembourg.

Where a holder of shares or ADSs is a resident of Luxembourg for tax purposes at the time of the holder's death, the shares or ADSs are included in its taxable estate for inheritance tax or estate tax purposes.

U.S. federal income taxation

This section describes the material U.S. federal income tax consequences to a U.S. holder (as defined below) of owning shares or ADSs. It applies to you only if you hold your shares or ADSs as capital assets for U.S. federal income tax purposes. This discussion addresses only U.S. federal income taxation and does not discuss all of the tax consequences that may be relevant to you in light of your individual circumstances, including foreign, state or local tax consequences, estate and gift tax consequences, and tax consequences arising under the Medicare contribution tax on net investment income or the alternative minimum tax. This section does not apply to you if you are a member of a special class of holders subject to special rules, including:

- a dealer in securities;
- a bank;
- a trader in securities that elects to use a mark-to-market method of accounting for securities holdings;
- a tax-exempt organization;
- a person who invests through a pass-through entity, including a partnership;
- a life insurance company;
- a person that actually or constructively owns 10% or more of the combined voting power of our voting stock or of the total value of our stock (including ADSs);
- a person that holds shares or ADSs as part of a straddle or a hedging or conversion transaction for U.S. federal income tax purposes;
- a person that purchases or sells shares or ADSs as part of a wash sale for U.S. federal income tax purposes; *or*
- a person whose functional currency is not the U.S. dollar.

This section is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations, published rulings and court decisions, all as currently in effect, as well as on the Convention between the Government of the Grand Duchy of Luxembourg and the Government of the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital (the “Treaty”). These laws are subject to change, possibly on a retroactive basis. In addition, this section is based in part upon the assumption that each obligation in the ADS deposit agreement and any related agreement will be performed in accordance with its terms.

If an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes holds the shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Each such partner of a partnership that holds the shares or ADSs is urged to consult his, her or its own tax advisor.

You are a U.S. holder if you are a beneficial owner of shares or ADSs and you are, for U.S. federal income tax purposes:

- an individual citizen or resident of the United States;
- a domestic corporation (or an entity treated as a domestic corporation);
- an estate whose income is subject to U.S. federal income tax regardless of its source; *or*
- a trust if (i) a U.S. court can exercise primary supervision over the trust’s administration and one or more U.S. persons are authorized to control all substantial decisions of the trust or (ii) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

In general, and taking into account the earlier assumptions, for U.S. federal income tax purposes, if you hold ADSs, you will be treated as the owner of the shares represented by those ADSs. Exchanges of shares for ADSs, and ADSs for shares, generally will not be subject to U.S. federal income tax.

The tax treatment of your shares or ADSs will depend in part on whether or not we are classified as a passive foreign investment company (“PFIC”), for United States federal income tax purposes. Except as discussed below under “PFIC Rules”, this discussion assumes that we are not classified as a PFIC for United States federal income tax purposes.

You should consult your own tax advisor regarding the U.S. federal, state and local and other tax consequences of owning and disposing of shares or ADSs in your particular circumstances.

Taxation of distributions

Under the U.S. federal income tax laws, if you are a U.S. holder, the gross amount of any distribution we pay out of our current or accumulated earnings and profits (as determined for U.S. federal income tax purposes), other than certain pro-rata distributions of our shares, will be treated as a dividend that is subject to U.S. federal income taxation. If you are a non-corporate U.S. holder, dividends paid to you that constitute qualified dividend income will be taxable to you at the preferential rates applicable to long-term capital gains provided that you hold shares or ADSs for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and meet other holding period requirements. Dividends we pay with respect to the shares or ADSs generally will be qualified dividend income, provided that, in the year that you receive the dividend, we are eligible for the benefits of the Treaty. We believe that we are currently eligible for the benefits of the Treaty and therefore expect that dividends on the shares or ADSs will be qualified dividend income, but there can be no assurance that we will continue to be eligible for the benefits of the Treaty.

You must generally include any Luxembourg tax withheld from the dividend payment in this gross amount even though you do not in fact receive it. The dividend is taxable to you when you receive it, or, in the case of ADSs, when the Depository receives the dividend, actually or constructively. The dividend 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. Distributions in excess of current and accumulated earnings and profits, as determined for U.S. federal income tax purposes, will be treated as a non-taxable return of capital to the extent of your basis in the shares or ADSs and thereafter as capital gain. However, we do not expect to calculate earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend (as discussed above).

Dividends will generally be income from sources outside the United States and, generally, will be “passive” income for purposes of computing the foreign tax credit allowable to you.

Subject to certain limitations, the Luxembourg tax withheld in accordance with the Treaty and paid over to Luxembourg may be creditable or deductible against your U.S. federal income tax liability. However, under recently finalized Treasury regulations, it is possible that taxes may not be creditable unless you are eligible for and elect to apply the benefits of the Treaty. Special rules apply in determining the foreign tax credit limitation with respect to dividends that are subject to the preferential tax rates. To the extent a refund of the tax withheld is available to you under Luxembourg law or under the Treaty, the amount of tax withheld that is refundable will not be eligible for credit against your U.S. federal income tax liability.

In certain circumstances, if you have held ADSs for less than a specified minimum period during which you are not protected from risk of loss, or are obligated to make payments related to the dividends, you will not be allowed a foreign tax credit for foreign taxes imposed on dividends that we pay.

The rules governing the foreign tax credit are complex. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

Taxation of capital gains

If you are a U.S. holder and you sell or otherwise dispose of your shares or ADSs, you will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference between the U.S. dollar value of the amount that you realize and your tax basis, determined in U.S. dollars, in your shares or ADSs. Capital gain of a non-corporate U.S. holder is generally taxed at preferential rates where the property is held for more than one year. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes. The deductibility of capital losses is subject to limitations.

PFIC rules. Based on the Company's current and expected income and assets, we believe that the shares or ADSs should not currently be treated as stock of a PFIC for U.S. federal income tax purposes, and we do not expect to become a PFIC in the foreseeable future. However, this conclusion is a factual determination that is made annually and thus may be subject to change. It is therefore possible that we could become a PFIC in a future taxable year. If we were to be treated as a PFIC, gain realized on the sale or other disposition of your shares or ADSs would in general not be treated as capital gain. Furthermore, if you are a U.S. holder, unless you are permitted to elect and you do elect to be taxed annually on a mark-to-market basis with respect to the shares or ADSs, upon sale or disposition of your shares or ADSs, you would generally be treated as if you had realized such gain and certain "excess distributions" ratably over your holding period for the shares or ADSs and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. With certain exceptions, your shares or ADSs will be treated as stock in a PFIC if we were a PFIC at any time during your holding period in your shares or ADSs. Dividends that you receive from us will not be eligible for the special tax rates applicable to qualified dividend income if we are a PFIC (or are treated as a PFIC with respect to you) either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income and subject to the excess distribution regime described above.

Documents on Display

The Company is subject to the reporting requirements of the Exchange Act, as applied to foreign private issuers. Accordingly, the Company is required to file annual and special reports and other information with the SEC; however, foreign private issuers are not required to deliver proxy statements or to file quarterly reports. We prepare quarterly and annual consolidated financial statements in accordance with IFRS. The Company's annual consolidated financial statements are audited by an independent accounting firm. The Company submits quarterly financial information with the SEC on Form 6-K simultaneously with or promptly following the publication of such information in Luxembourg and any other jurisdiction in which the Company's securities are listed. In addition, the Company files annual reports on Form 20-F within the time period required by the SEC, which is currently four months from the close of the Company's fiscal year on December 31. Reports and other information filed electronically with the SEC are available at the SEC's Internet website at <http://www.sec.gov>. In addition, such reports and other communications are made available to all shareholders and holders of ADSs on the Company's website at: <https://ir.tenaris.com/investor-relations>.

For the year ended December 31, 2022, Deutsche Bank Trust Company Americas acted as depository under the ADSs deposit agreement. As long as the deposit agreement remains in effect, the Company will furnish the Depository with:

- its annual reports, *and*
- copies of all notices of shareholders' meetings and other reports and communications that are made generally available to the Company's shareholders.

The Depository will, as provided in the deposit agreement and if requested in writing by the Company, arrange for the mailing of such reports, notices and communications to all record holders of ADSs, on a basis similar to that for holders of shares, or on such other basis as the Company may advise the Depository may be required by any applicable law or regulation or any requirement of any stock exchange to which the Company may be subject. Any reports and communications, including any proxy solicitation material, shall be furnished in English to the extent such materials are required to be translated into English pursuant to any regulations of the SEC.

Any record holder of ADSs may read the reports, notices, and other communications including any proxy solicitation material at the Depository's office located at One Columbus Circle, New York, New York 10019.

In addition, such reports, notices and other communications are made available to all shareholders and holders of ADSs on the Company's website at: <https://ir.tenaris.com/investor-relations>

Whenever a reference is made in this annual report to a contract or other document, please be aware that such reference is not necessarily complete and that you should refer to the exhibits that are a part of this annual report for a copy of the contract or other document.

Quantitative and Qualitative Disclosure about Market Risk

The multinational nature of our operations and customer base expose us to a variety of risks, including the effects of changes in foreign currency exchange rates, interest rates and commodity prices. In order to reduce the impact related to these exposures, management evaluates exposures on a consolidated basis to take advantage of natural exposure netting. For the residual exposures, we may enter into various derivative transactions in order to reduce potential adverse effects on our financial performance. Such derivative transactions are executed in accordance with internal policies and hedging practices. We do not enter into derivative financial instruments for trading or other speculative purposes, other than non-material investments in structured products.

The following information should be read together with section III, “Financial risk management” to our audited consolidated financial statements included elsewhere in this annual report.

Debt Structure

The following tables provide a breakdown of our debt instruments at December 31, 2022 and 2021 which included fixed and variable interest rate obligations, detailed by maturity date:

At December 31, 2022	Expected maturity date						Total ⁽¹⁾
<i>(in millions of U.S. dollars)</i>	2023	2024	2025	2026	2027	Thereafter	
Non-current Debt							
Fixed rate	-	19	-	-	-	-	19
Variable rate	-	23	3	2	-	-	28
Current Debt							
Fixed rate	479	-	-	-	-	-	479
Variable rate	203	-	-	-	-	-	203
	682	42	3	2	-	-	729
<hr/>							
At December 31, 2021	Expected maturity date						Total ⁽¹⁾
<i>(in millions of U.S. dollars)</i>	2022	2023	2024	2025	2026	Thereafter	
Non-current Debt							
Fixed rate	-	8	4	-	-	-	12
Variable rate	-	100	-	-	-	-	100
Current Debt							
Fixed rate	175	-	-	-	-	-	175
Variable rate	44	-	-	-	-	-	44
	219	107	4	-	-	-	331

(1) As most borrowings are based on short-term fixed rates, or variable rates that approximate market rates, with interest rate resetting every 3 to 6 months, the fair value of the borrowings approximates its carrying amount and is not disclosed separately.

Our weighted average interest rates before tax (considering hedge accounting), amounted to 9.45% at December 31, 2022 and to 2.09% at December 31, 2021.

Our financial liabilities (other than trade payables and derivative financial instruments) consist mainly of bank loans. As of December 31, 2022, U.S. dollar denominated financial debt plus debt denominated in other currencies swapped to the U.S. dollar represented 78% of total financial debt.

For further information about our financial debt, please see note 20 “Borrowings” to our audited consolidated financial statements included in this annual report.

Interest Rate Risk

Fluctuations in market interest rates create a degree of risk by affecting the amount of our interest payments. At December 31, 2022, we had variable interest rate debt of \$231 million and fixed rate debt of \$498 million (\$479 million of the fixed rate debt is short-term).

Foreign Exchange Rate Risk

We manufacture and sell our products in a number of countries throughout the world and consequently we are exposed to foreign exchange rate risk. Since the Company’s functional currency is the U.S. dollar, the purpose of our foreign currency hedging program is mainly to reduce the risk caused by changes in the exchange rates of other currencies against the U.S. dollar.

Most of our revenues are determined or influenced by the U.S. dollar. In addition, a relevant part of our costs corresponds to steelmaking raw materials and steel coils and plates, also determined or influenced by the U.S. dollar. However, outside the United States, a portion of our expenses is incurred in foreign currencies (e.g. labor costs). Therefore, when the U.S. dollar weakens in relation to the foreign currencies of the countries where we manufacture our products, the U.S. dollar-reported expenses increase. Had the U.S. dollar average exchange rate been weaker by 5% against the currencies of the countries where we have labor costs, operating income would have decreased approximately by \$60 million in 2022, compared to \$46 million in 2021.

Our consolidated exposure to currency fluctuations is reviewed on a periodic basis. A number of hedging transactions are performed in order to achieve an efficient coverage in the absence of operative or natural hedges. Almost all of these transactions are forward exchange rate contracts.

Because certain subsidiaries have functional currencies other than the U.S. dollar, the results of hedging activities as reported in the income statement under IFRS may not reflect entirely management’s assessment of its foreign exchange risk hedging needs. Also, intercompany balances between our subsidiaries may generate exchange rate results to the extent that their functional currencies differ.

The value of our financial assets and liabilities is subject to changes arising out of the variation of foreign currency exchange rates. The following table provides a breakdown of our main financial assets and liabilities (including foreign exchange derivative contracts) that impact our profit and loss as of December 31, 2022.

All amounts in millions of U.S. dollars

Currency Exposure	Functional currency	Long / (Short) Position
Argentine Peso	U.S. dollar	(127)
Euro	U.S. dollar	(42)
Saudi Arabian Riyal	U.S. dollar	(74)
U.S. dollar	Brazilian Real	(95)

The main relevant exposures as of December 31, 2022 were to Argentine Peso-denominated financial, trade, social and fiscal payables at our Argentine subsidiaries, for which the functional currency is the U.S. dollar, Euro-denominated intercompany liabilities at certain subsidiaries whose functional currency is the U.S. dollar, U.S. dollar-denominated intercompany liabilities at certain subsidiaries whose functional currency is the Brazilian Real and Saudi Arabian Riyal-denominated financial and trade payables. The Saudi Arabian Riyal is tied to the dollar.

Foreign Currency Derivative Contracts

The net fair value of our foreign currency derivative contracts amounted to an asset of \$27 million at December 31, 2022 and an asset of \$20 thousand at December 31, 2021. For further detail on our foreign currency derivative contracts, please see note 25 “Derivative financial instruments – Foreign exchange and commodities derivative contracts and hedge accounting” to our audited consolidated financial statements included in this annual report.

Concentration of Credit Risk

There is no significant concentration of credit from customers. No single customer comprised more than 10% of our net sales in 2022, 2021 and 2020.

Our credit policies related to sales of products and services are designed to identify customers with acceptable credit history, and to allow us to use credit insurance, letters of credit and other instruments designed to minimize credit risk whenever deemed necessary. We maintain allowances for potential credit losses.

Commodity Price Risk

In the ordinary course of its operations, Tenaris purchases commodities and raw materials that are subject to price volatility caused by supply conditions, political and economic variables and other factors. As a consequence, Tenaris is exposed to risk resulting from fluctuations in the prices of these commodities and raw materials. Tenaris fixes the prices of such raw materials and commodities for short-term periods, typically not in excess of one year, and in general hedging for these risks is performed on a limited basis.

Commodities Derivative Contracts

The net fair value of our commodities derivative contracts amounted to a liability of \$3 million at December 31, 2022 and a liability of \$33 thousand at December 31, 2021. For further detail on our commodities derivative contracts, please see note 25 “Derivative financial instruments – Foreign exchange and commodities derivative contracts and hedge accounting” to our audited consolidated financial statements included in this annual report.

Accounting for Derivative Financial Instruments and Hedging Activities

Derivative financial instruments are classified as financial assets (or liabilities) at fair value through profit or loss. Their fair value is calculated using standard pricing techniques and, as a general rule, we recognize the full amount related to the change in its fair value under financial results in the current period.

We designate for hedge accounting certain derivatives and non-derivative financial liabilities to hedge risks associated with recognized assets, liabilities or highly probable forecast transactions. These instruments are classified as cash flow hedges. The effective portion of the fair value of such derivatives is accumulated in a reserve account in equity. Amounts accumulated in equity are then recognized in the income statement in the same period when the offsetting losses and gains on the hedged item are recorded. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of our derivative financial instruments (assets or liabilities) continues to be reflected on the consolidated statement of financial position.

At December 31, 2022, the effective portion of designated cash flow hedges, included in other reserves in shareholders' equity amounted to a credit of \$13.1 million.

Description of Securities Other Than Equity Securities

American Depositary Shares

According to the Company's deposit agreement, holders of ADSs may have to pay to the Depository, either directly or indirectly, fees or charges up to the amounts set forth below:

- A fee of \$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) for: issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; and cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates.
- A fee of \$0.02 (or less) per ADSs for any cash distribution to ADS registered holders, excluding cash dividend.
- Any charges for taxes and other governmental charges that the Depositary or the custodian may be required to pay on any ADS or share underlying an ADS (e.g., share transfer taxes, stamp duty or withholding taxes); and any charges incurred by the Depositary or its agents for servicing the depositary securities.
- Registration or transfer fees for transfer and registration of shares on our share register to or from the name of the Depositary or its agent when you deposit or withdraw shares.
- Expenses of the Depositary for cable, telex and facsimile transmissions (when expressly provided in the deposit agreement) and conversion of foreign currency.
- A fee equivalent to the fee that would be payable if securities distributed to ADS holders had been shares and the shares had been deposited for issuance of ADSs for distribution of securities distributed to holders of deposited securities which are distributed by the Depositary to ADS registered holders.
- As necessary, charges for any costs incurred by the Depositary or its agents for servicing the deposited securities.

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Under the deposit agreement with the Depositary, the Depositary is not liable to holders of ADSs, except that the Depositary agrees to perform its obligations specifically set forth therein without gross negligence and willful misconduct.

Fees Payable by the Depositary to the Company

Under its agreement with the Depositary, the Company is entitled to receive certain fees from the Depositary, based on the Depositary's revenues resulting from issuance and cancellation fees charged to ADR holders, net of custody and safe keeping costs. In addition, the Depositary has waived the cost of providing administrative and reporting services, and access charges in connection with the Company's ADR Program.

Fees paid in 2022

In 2022, the Company received from the Depositary fees for an amount of \$1,162,434, corresponding to the period March 1, 2021 through March 12, 2022.

Fees payable during 2023

During 2023, the Company collected fees from the Depositary for an amount of \$932,082, corresponding to the period March 13, 2022 through March 12, 2023.

Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including the Company's chief executive officer and chief financial officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2022.

Based on that evaluation, the Company's chief executive officer and chief financial officer have concluded that, as of December 31, 2022, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and to ensure that such information is accumulated and communicated to management, including the Company's chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. The Company's chief executive officer and chief financial officer have concluded that our disclosure controls and procedures are effective at a reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting was designed by management to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its financial statements for external purposes in accordance with IFRS.

In addition, under the Company's articles of association, as supplemented by the audit committee's charter, the audit committee assists the board of directors in fulfilling its oversight responsibilities relating to the effectiveness of the Company's systems of internal control, risk management and internal audit over financial reporting. In particular, the audit committee is required to review the scope and results of the activities of the Company's external auditors and the internal audit function relating to the Company's internal control over financial reporting, and obtain reports on significant findings and recommendations; and is also required to assess, at least annually at the time the annual accounts are approved, the effectiveness of the Company's systems of internal control and risk management over financial reporting.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or omissions. In addition, 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.

On a yearly basis, management conducts its assessment of the effectiveness of Tenaris's internal control over financial reporting based on the framework in *Internal Control- Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

On February 14, 2023, management reported to the Audit Committee of the Company's board of directors that management had conducted its assessment of the effectiveness of the Company's internal controls over financial reporting for the year ended December 31, 2022, and that, based on management's evaluation and considering the inherent limitations to the effectiveness of any internal control system, management had concluded that the Company's internal controls over financial reporting were effective as of December 31, 2022.

The effectiveness of Tenaris's internal control over financial reporting as of December 31, 2022, has been audited by PwC Luxembourg, as stated in their report included herein. See "Report of Independent Registered Public Accounting Firm".

Attestation Report of Registered Public Accounting Firm

See page F-1 of the audited consolidated financial statements included in this report.

Change in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as such term is defined in Rules 13a -15(f) and 15d -15(f) under the Exchange Act) during the year ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Audit Committee Financial Expert

The Company's board of directors has determined that Ms. Monica Tiuba, the audit committee's chairperson, meets the attributes defined by the SEC for an "audit committee financial expert" and has competence in accounting or auditing matters, as required by applicable Luxembourg law. In addition, the audit committee, as a whole, has sufficient relevant knowledge of the business and financial experience to properly discharge its functions. The audit committee has the authority to engage, at the Company's expense, independent counsel and other internal or external advisors to review, investigate or otherwise advise on, any matter, as the audit committee may determine to be necessary to carry out its purposes and responsibilities.

Code of Ethics

The Company has adopted a general code of conduct incorporating guidelines and standards of integrity and transparency applicable to all directors, officers and employees. As far as the nature of each relation permits, all principles detailed in the code of conduct also apply to relations with our contractors, subcontractors, suppliers and associated persons. In addition, the Company has adopted a code of ethics for senior financial officers, which is intended to supplement the Company's code of conduct, and applies specifically to the principal executive officer, the principal financial officer, the principal accounting officer or controller, as well as persons performing similar functions.

Our code of conduct and our code of ethics for senior financial officers are posted on our website at:

<https://www.tenaris.com/en/sustainability/governance-and-ethics/>

Principal Accountant Fees and Services

Principal Accountant Fees

In 2022 and 2021, PwC Luxembourg served as the principal external auditor for the Company. Fees accrued to PwC Luxembourg and other PwC member firms for the years ended December 31, 2022 and December 31, 2021 are detailed below.

<i>Thousands of U.S. dollars</i>	For the year ended December 31,	
	2022	2021
Audit Fees	3,966	3,804
Audit-Related Fees	255	220
Tax Fees	-	-
All Other Fees	11	5
Total	4,232	4,029

Audit Fees

Audit fees were paid for professional services rendered by the auditors for the audit of the consolidated financial statements and internal control over financial reporting of the Company, the statutory financial statements of the Company and its subsidiaries, and any other audit services required for the U.S. Securities and Exchange Commission or other regulatory filings.

Audit-Related Fees

Audit-related fees are typically services that are reasonably related to the performance of the audit or review of the consolidated financial statements of the Company and the statutory financial statements of the Company and its subsidiaries and are not reported under the audit fee item above. This item includes fees for attestation services on financial information of the Company and its subsidiaries included in their annual reports that are filed with their respective regulators.

Tax Fees

Fees paid for tax compliance professional services.

All Other Fees

Fees paid for the support in the development of training courses.

Audit Committee's Pre-approval Policies and Procedures

The Company's Audit Committee is responsible for, among other things, the oversight of the Company's external auditors. Under its charter, the audit committee is responsible to review the appropriateness of, and approve, in advance, the provision of any permissible non-audit services by the external auditors; and to review and approve any fees, whether for audit, audit-related, or non-audit services payable to the external auditors.

The audit committee makes its recommendations to the shareholders' meeting concerning the continuing appointment or termination of the Company's external auditors. On a yearly basis, the audit committee reviews, together with management and the external auditor, the audit plan, audit related services and other permissible non-audit services and approves, *ad-referendum* of the general shareholders' meeting, the related fees. With respect to non-audit services, the audit committee annually approves an estimated amount for undetermined non-audit services, conditioned upon final review and approval of such services by the audit committee. The audit committee annually receives from the external auditor the written disclosures required by PCAOB Rule 3524 "Audit Committee Pre-Approval of Certain Tax Services", together with a description of the scope of tax services for such year, and the external auditors' confirmation that such non-audit services are consistent with the Sarbanes-Oxley Act, SEC Regulation S-X Rule 2-01, and applicable PCAOB rules. The Audit Committee did not approve any fees pursuant to the *de minimis* exception to the pre-approval requirement provided by paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X during 2022 or 2021.

The general shareholders' meeting normally approves such audit fees and authorizes the audit committee to approve any increase or reallocation of such audit fees as may be necessary, appropriate or desirable under the circumstances. No services outside the scope of the audit committee's approval may be undertaken by the external auditor.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In 2022, there were no purchases of any class of registered equity securities of the Company by the Company or, to our knowledge, by any "affiliated purchaser" (as such term is defined in Rule 10b-18(a)(3) under the Exchange Act).

On June 2, 2020, at the Company's general meeting of shareholders, the Company's shareholders authorized the Company and the Company's subsidiaries to acquire, from time to time, shares, including shares represented by ADSs, on the following terms and conditions:

- Purchases, acquisitions or receipts of securities may be made in one or more transactions as the board of directors of the Company or the board of directors or other governing bodies of the relevant entity, as applicable, considers advisable.
- The maximum number of securities acquired pursuant to this authorization may not exceed 10% of the Company's issued and outstanding shares or, in the case of acquisitions made through a stock exchange in which the securities are traded, such lower amount as may not be exceeded pursuant to any applicable laws or regulations of such market. The number of securities acquired as a block may amount to the maximum permitted amount of purchases.
- The purchase price per share to be paid in cash may not exceed 125% (excluding transaction costs and expenses), nor may it be lower than 75% (excluding transaction costs and expenses), in each case of the average of the closing prices of the Company's securities in the stock exchange through which the Company's securities are acquired, during the five trading days in which transactions in the securities were recorded in such stock exchange preceding (but excluding) the day on which the Company's securities are acquired. For over-the-counter or off-market transactions, the purchase price per ADS to be paid in cash may not exceed 125% (excluding transaction costs and expenses), nor may it be lower than 75% (excluding transaction costs and expenses), in each case of the average of the closing prices of the ADSs in the NYSE during the five trading days in which transactions in ADSs were recorded in the NYSE preceding (but excluding) the day on which the ADSs are acquired; and, in the case of acquisition of securities, other than in the form of ADSs, such maximum and minimum per security purchase prices shall be equal to the prices that would have applied in case of an ADS purchase pursuant to the formula above divided by the number of underlying shares represented by an ADS at the time of the relevant purchase. Compliance with maximum and minimum purchase price requirements in any and all acquisitions made pursuant to this authorization (including, without limitation, acquisitions carried out through the use of derivative financial instruments or option strategies) shall be determined on and as of the date on which the relevant transaction is entered into, irrespective of the date on which the transaction is to be settled.
- The above maximum and minimum purchase prices shall, in the event of a change in the par value of the securities, a capital increase by means of a capitalization of reserves, a distribution of securities under compensation or similar programs, a stock split or reverse stock split, a distribution of reserves or any other assets, the redemption of capital, or any other transaction impacting on the Company's equity, be adapted automatically, so that the impact of any such transaction on the value of the securities shall be reflected.
- The acquisitions of securities may not have the effect of reducing the Company's net assets below the sum of the Company's share capital plus its undistributable reserves.
- Only fully paid-up securities may be acquired pursuant to this authorization.
- The acquisitions of securities may be carried out for any purpose, as may be permitted under applicable laws and regulations, including without limitation to reduce the share capital of the Company, to offer such shares to third parties in the context of corporate mergers or acquisitions of other entities or participating interests therein, for distribution to the Company's or the Company's subsidiaries' directors, officers or employees or to meet obligations arising from convertible debt instruments.
- The acquisitions of securities may be carried out by any and all means, as may be permitted under applicable laws and regulations, including through any stock exchange in which the Company's securities are traded, through public offers to all shareholders of the Company to buy securities, through the use of derivative financial instruments or option strategies, or in over-the-counter or off-market transactions or in any other manner.
- The acquisitions of securities may be carried out at any time, during the duration of the authorization, including during a tender offer period, as may be permitted under applicable laws and regulations.
- The authorization granted to acquire securities shall be valid for such maximum period as may be provided for under applicable Luxembourg law as in effect from time to time (such maximum period being, as of to date, 5 years).
- The acquisitions of securities shall be made at such times and on such other terms and conditions as may be determined by the board of directors of the Company or the board of directors or other governing bodies of the relevant subsidiary, provided that, any such purchase shall comply with Article 430-15 et. seq. of the Luxembourg Company Law (or any successor law) and, in the case of acquisitions of securities made through a stock exchange in which the Company's securities are traded, with any applicable laws and regulations of such market.

In the future, we may, on the terms and subject to the conditions above referred, initiate a share capital repurchase or similar program or engage in other transactions pursuant to which we would repurchase, directly or indirectly, the Company's securities. In addition, we or our subsidiaries may enter into transactions involving sales or purchases of derivatives or other instruments, either settled in cash or through physical delivery of securities, with returns linked to the Company's securities. The timing and amount of repurchase transactions under any such program, or sales or purchases of derivatives or other instruments, would depend on market conditions as well as other corporate and regulatory considerations.

Change in Registrant's Certifying Accountant

Following the completion of a tender process for the selection of a replacement audit firm for the year 2024, in response to applicable EU and Luxembourg mandatory auditor rotation rules, on November 3, 2022, the Company's board of directors, based on the audit committee's recommendation, recommended that the next annual general shareholders' meeting, scheduled to be held on May 3, 2023, appoint EY as the Company's external auditors for the fiscal year ending December 31, 2024.

Corporate Governance Statement

The Company's corporate governance practices are governed by Luxembourg Law (including, among others, the Luxembourg Company Law, the Luxembourg Law of January 11, 2008 on transparency requirements for issuers, as amended (which transposes EU Directive 2004/109 of the European Parliament and of the Council of December 15, 2004), the Shareholders' Rights Law and the Luxembourg law of July 23, 2016, concerning the audit profession (the "Audit Reform Law") and by the Company's articles of association. The following is a summary of certain rights of holders of the Company's shares and includes the information required under the Luxembourg Law on takeovers of May 19, 2006. Shareholders' rights are set out in the Company's articles of association and are provided by applicable Luxembourg law, and may differ from those typically provided to shareholders of U.S. companies under the corporation laws of some states of the United States. This summary is not exhaustive and does not contain all information that may be important to investors. For more complete information, you should read the Company's articles of association, which are attached as an exhibit to this annual report.

Corporate Governance

Memorandum and Articles of Association

The Company is a public limited liability company (*société anonyme*) organized under the laws of Luxembourg, registered under the number B85 203 in the Luxembourg *Registre de Commerce et des Sociétés*. Its object and purpose, as set forth in Article 2 of its articles of association, is the taking of interests, in any form, in corporations or other business entities, and the administration, management, control and development thereof.

The Company's authorized share capital is fixed by the Company's articles of association as amended from time to time with the approval of shareholders at an extraordinary general shareholders' meeting. The Company has an authorized share capital of a single class of 2,500,000,000 shares having a nominal value of USD1.00 per share. There were 1,180,536,830 shares issued as of the date of this annual report. All issued shares are fully paid.

The Company's articles of association authorize the board of directors, or any delegate(s) duly appointed by the board of directors, to issue shares within the limits of the authorized share capital against contributions in cash, contributions in kind or by way of available reserves, at such time and on such terms and conditions, including the issue price, as the board of directors, or its delegate(s), may in its or their discretion resolve.

The Company's extraordinary shareholders' meeting held on June 2, 2020 approved the renewal for an additional five-year period of the authorization granted to the board of directors to waive, suppress or limit any preemptive subscription rights of shareholders provided for by law to the extent it deems such waiver, suppression or limitation advisable for any issue or issues of shares within the authorized share capital; and have waived any preemptive subscription rights provided for by law and related procedures. The validity period of such authorization will expire on June 12, 2025. However, under the Company's articles of association, the Company's existing shareholders shall have a preferential right to subscribe for any new shares issued pursuant to the authorization granted to its board of directors, except in the following cases (in which cases no preemptive subscription rights shall apply):

- any issuance of shares (including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash; *and*
- any issuance of shares (including by way of free shares or at discount), up to an amount equal to 1.5% of the issued share capital of the Company, to directors, officers, agents or employees of the Company, its direct or indirect subsidiaries, or its affiliates, including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive for any such persons or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit).

Amendment of the Company's articles of association requires the approval of shareholders at an extraordinary shareholders' meeting with a two-thirds majority vote of the shares represented at the meeting.

The Company is controlled by San Faustin, which owns 60.45% of the Company's outstanding shares, through its wholly owned subsidiary Techint Holdings S.à r.l. The Dutch private foundation (Stichting) RP STAK holds voting rights in San Faustin sufficient to control San Faustin. No person or group of persons controls RP STAK.

Our directors and senior management as a group own 0.07% of the Company's outstanding shares, while the remaining 39.48% are publicly traded. The Company's shares trade on the Italian Stock Exchange and the Mexican Stock Exchange; in addition, the Company's ADSs trade on the NYSE. See "Major Shareholders and Related Party Transactions".

Dividends

Subject to applicable law, all shares (including shares underlying ADSs) are entitled to participate equally in dividends when, as and if declared by the shareholders at the annual general shareholders' meeting, out of funds legally available for such purposes.

Dividends may be lawfully declared and paid if the Company's net profits and distributable reserves are sufficient under Luxembourg law. The amount and payment of dividends must be approved by a majority vote at a general shareholders' meeting, generally, but not necessarily, based on the recommendation of the Company's board of directors. Under Article 21 of the Company's articles of association, the board of directors has the power to distribute interim dividends out of profits, share premium or any other available reserves, in accordance with applicable law, in particular in accordance with the conditions set forth in Article 461-3 of the Luxembourg Company Law. Such dividend payments must be finally approved by the general shareholders' meeting. On February 15, 2023 the board of directors announced the proposals to be submitted to the consideration of the annual general shareholders' meeting, including its proposal on dividends.

As provided by Article 21 of the Company's articles of association, dividends or other distributions declared by the general meeting as well as interim dividends or other distributions declared by the board of directors will be distributed at the times and places determined by the board of directors. The Company will make any and all dividend payments and any other distributions in respect of shares registered in the name of any securities settlement system or operator of such a system or in the name of any financial institution or other professional depository of securities or any other depository, whether in cash, shares or other assets, only to such registered holder, or otherwise in accordance with such registered holder's instructions, and, as provided by Article 21 of the Company's articles of association, that payment shall release the Company from any and all obligations for such payment.

The Company conducts and will continue to conduct its operations through subsidiaries and, accordingly, its main source of cash to pay dividends, among other possible sources, will be the dividends received from its subsidiaries. For further information see "Key Information – Risk Factors – Risks Relating to the Structure of the Company – The Company's dividend payments depend on the results of operations and financial condition of its subsidiaries and could be restricted by legal, contractual or other limitations or tax changes".

Under Luxembourg law, claims for dividends will lapse in favor of the Company five years after the date such dividends are declared. However, the Company may elect to pay a declared dividend after such period. Declared and unpaid dividends held by the Company for the account of its shareholders do not bear interest.

Pursuant to Luxembourg law, at least 5% of our net profits per year must be allocated to the creation of a legal reserve until such reserve has reached an amount equal to 10% of our issued share capital. If the legal reserve later falls below the 10% threshold, at least 5% (or such lower amount required to reach the 10% threshold) of net profits again must be allocated toward the reserve. As of December 31, 2022, the Company's legal reserve represented 10% of its share capital. The legal reserve is not available for distribution.

Shareholders' Meetings; Voting Rights; Election of Directors

Each share entitles the holder thereof to one vote at the Company's general shareholders' meetings. Shareholder action by written consent is not permitted, but proxy voting is permitted. Notices of general shareholders' meetings are governed by the provisions of Luxembourg law and the Company's articles of association. Pursuant to applicable Luxembourg law, the Company must give notice of the calling of any general shareholders' meeting at least 30 days prior to the date for which the meeting is being called, by publishing the relevant convening notice in the *Recueil Electronique des Sociétés et Associations* (Luxembourg's electronic official gazette) and in a leading newspaper having general circulation in Luxembourg and by issuing a press release informing of the calling of such meeting. In case the Company's shares are listed on a foreign regulated market, notices of general shareholders' meetings shall also comply with the requirements (including as to content and publicity) and follow the customary practices of such regulated market.

Pursuant to the Company's articles of association, for as long as the shares or other securities of the Company are listed on a regulated market within the European Union (as they currently are), and unless otherwise provided by applicable law, only shareholders holding shares as of midnight, central European time, on the day that is fourteen days prior to the day of any given general shareholders' meeting can attend and vote at such meeting. The board of directors may determine other conditions that must be satisfied by shareholders in order to participate in a general shareholders' meeting in person or by proxy, including with respect to deadlines for submitting supporting documentation to or for the Company.

No attendance quorum is required at ordinary general shareholders' meetings, and resolutions may be adopted by a simple majority of the votes validly cast, irrespective of the number of shares present or represented. Unless otherwise provided by applicable law, an extraordinary general shareholders' meeting may not validly deliberate on proposed amendments to the Company's articles of association unless a quorum of at least half of the share capital is represented at the meeting. If a quorum is not reached at the first extraordinary shareholders' meeting, a second extraordinary shareholders' meeting may be convened in accordance with the Company's articles of association and applicable law and such second extraordinary general shareholders' meeting shall validly deliberate regardless of the number of shares represented. In both cases, the Luxembourg Company Law and the Company's articles of association require that any resolution of an extraordinary general shareholders' meeting as to amendments to the Company's articles of association be adopted by a two-thirds majority of the votes validly cast at the meeting. If a proposed resolution consists of changing the Company's nationality or of increasing the shareholders' commitments, the unanimous consent of all shareholders is required.

Cumulative voting is not permitted. The Company's articles of association do not provide for staggered terms and directors are elected for a maximum of one year but may be reappointed or removed at any time, with or without cause, by the general shareholders' meeting, by resolution passed by a simple majority vote of the shares validly cast at the meeting. In the case of a vacancy occurring in the board of directors, the remaining directors shall have the right to temporarily fill such vacancy with a temporary director appointed by resolution adopted with the affirmative vote of a majority of the remaining directors; provided that the next general shareholder's meeting shall be called upon to ratify such appointment. The term of any such temporary director elected to fill a vacancy shall expire at the end of the term of office of the replaced director.

The next Company's annual general shareholders' meeting, that will consider, among other matters our Consolidated Financial Statements and Annual Accounts included in this annual report, will take place in the Company's registered office in Luxembourg, on Wednesday, May 3, 2023, at 4:00 p.m. Central European Time.

The articles of association provide that annual general shareholders' meetings shall meet in Luxembourg within six months from the end of the previous financial year at the date, place and hour indicated in the convening notice. The rights of the shareholders attending the meetings are governed by Shareholders' Rights Law.

Holders of shares deposited in fungible securities accounts have the same rights and obligations as holders of shares recorded in the Company's share register. However, in order to be able to participate in and vote at shareholders' meetings of the Company, the former must submit, prior to the relevant meeting, reasonably satisfactory evidence to the Company as to the number of shares held on the applicable record date for such meeting. For as long as the shares or the other securities of the Company are listed on a regulated market within the European Union, participation in a shareholders' general meeting shall *inter alia* be subject to the relevant shareholder holding shares of the Company on the fourteenth day midnight Central European Time prior to the meeting (unless otherwise provided for by applicable law).

Holders of ADSs only have those rights that are expressly granted to them in the deposit agreement. See "Key Information – Risk Factors – Risks Relating to shares and ADSs – Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders". ADS holders may not attend or directly exercise voting rights in shareholder' meetings, but holders of record of our ADSs as of the relevant ADS holders' record date set for any given general shareholders' meeting are entitled to instruct the Depositary as to the exercise of the voting rights in respect of the shares underlying such holder's ADSs at such meeting. Holders of ADSs maintaining non-certificated positions must follow voting instructions given by their broker or custodian bank.

The notice to the annual general shareholders meeting to be held on May 3, 2023, and the Shareholder Meeting Brochure and Proxy Statement for the meeting, describing the procedures for voting at the meeting applicable to holders of ADSs will be made available on the Company's website at <https://ir.tenaris.com/investor-relations> in accordance with applicable rules and regulations, and will be timely filed by the Company in a report of foreign issuer on Form 6-K.

Management

Management of the Company is vested in a board of directors. For more information on the Company's board of directors, audit committee, senior management, and auditors, see "Directors, Senior Management and Employees".

Access to Corporate Records

Luxembourg law and the Company's articles of association do not generally provide for shareholder access to corporate records. Shareholders may inspect the annual accounts and auditors' reports at our registered office during the fifteen-day period prior to a general shareholders' meeting.

Appraisal Rights

In the event the Company's shareholders approve:

- the delisting of the shares from all stock exchanges where the shares are listed at that time;
- a merger in which the Company is not the surviving entity (unless the shares or other equity securities of such entity are listed on the New York or London stock exchanges);
- a sale, lease, exchange or other disposition of all or substantially all of the Company's assets;
- an amendment of our articles of association that has the effect of materially changing the Company's corporate purpose;
- the relocation of the Company's domicile outside of the Grand Duchy of Luxembourg; *or*
- amendments to the Company's articles of association that restrict the rights of the Company's shareholders.

Dissenting or absent shareholders have the right to have their shares repurchased by the Company at (i) the average market value of the shares over the 90 calendar days preceding the applicable shareholders' meeting or (ii) in the event that the shares are not traded on a regulated market, the amount that results from applying the proportion of the Company's equity that the shares being sold represent over the Company's net worth as of the date of the applicable shareholders' meeting.

Dissenting or absent shareholders must present their claim within one month following the date of the shareholders' meeting and supply the Company with evidence of their shareholding at the time of such meeting. The Company must (to the extent permitted by applicable laws and regulations and in compliance therewith) repurchase its shares within six months following the date of the shareholders' meeting.

If delisting from one or more, but not all, of the stock exchanges where the shares are listed is approved in the shareholders' meeting, only dissenting or absent shareholders with shares held through participants in the local clearing system for that market or markets can exercise this appraisal right if:

- they held the shares as of the date of the announcement by the Company of its intention to delist or as of the date of publication of the first convening notice for the general shareholders' meeting that approved the delisting; *and*
- they present their claim within one month following the date of the general shareholders' meeting and supply evidence of their shareholding as of the date of the Company's announcement or the publication of the first convening notice to the meeting.

In the event a shareholder exercises its appraisal rights, applicable Luxembourg law provisions shall apply.

Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders, including appraisal rights. See "Key Information – Risk Factors – Risks Relating to shares and ADSs – Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders".

Distribution of Assets on Winding-Up

In the event of the Company's liquidation, dissolution or winding-up, the net assets remaining after allowing for the payment of all debts, charges and expenses will be paid out to the holders of the shares in proportion to their respective holdings.

Transferability and Form

The Company's articles of association do not contain any redemption or sinking fund provisions, nor do they impose any restrictions on the transfer of shares. The shares are issuable in registered form only.

The ownership of registered shares is evidenced by the inscription of the name of the shareholder, the number of shares held by such shareholders and the amount paid on each share in the Company's share register. In addition, the Company's shares may be held through fungible securities accounts with financial institutions or other professional depositaries.

Shares held through fungible securities accounts may be transferred in accordance with customary procedures for the transfer of securities in book-entry form. Shares that are not held through fungible securities accounts may be transferred by a written statement of transfer signed by both the transferor and the transferee or their respective duly appointed attorney-in-fact and recorded in the Company's share register. The transfer of shares may also be made in accordance with the provisions of Article 1690 of the Luxembourg Civil Code. As evidence of the transfer of registered shares, the Company may also accept any correspondence or other documents evidencing the agreement between transferor and transferee as to the transfer of registered shares.

Repurchase of Company shares

The Company may repurchase its own shares in the cases and subject to the conditions set by the Luxembourg Company Law and, in the case of acquisitions of shares or ADSs made through a stock exchange in which shares or ADSs are traded, with any applicable laws and regulations of such market. Please see "Purchase of Equity Securities by the Issuer and Affiliated Purchasers" for further information on the authorization granted on June 2, 2020, by the annual general meeting of shareholders to the Company or its subsidiaries to repurchase shares of the Company, including shares represented by ADSs.

Limitation on Securities Ownership

There are no limitations currently imposed by Luxembourg law or the articles of association on the rights of the Company's non-resident or foreign shareholders to hold or vote the Company's shares.

Change in Control

None of our outstanding securities has any special control rights. The Company's articles of association do not contain any provision that would have the effect of delaying, deferring or preventing a change in control of the Company and that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company or any of its subsidiaries. In addition, the Company does not know of any significant agreements or other arrangements to which the Company is a party and which take effect, alter or terminate in the event of a change of control of the Company. There are no agreements between the Company and members of its board of directors or employees providing for compensation if they resign or are made redundant without reason, or if their employment ceases following a change in control of the Company.

There are no rights associated with the Company's shares other than those described above.

Ownership Disclosure

The Company's articles of association do not contain any provision requiring disclosure of share ownership. However, under the Luxembourg Transparency Law investors in the Company's securities should notify the Company and the Luxembourg securities commission on an ongoing basis whenever the proportion of voting rights held or controlled by any such investor reaches, exceeds or falls below any of the following thresholds: 5%, 10%, 15%, 20%, 25%, 33.33%, 50% and 66.66%. Failure to notify the Company and the Luxembourg securities commission of the reaching or crossing of any such thresholds may result in the suspension of the voting rights attaching to the shares exceeding the threshold which would have had to be notified.

Diversity and Inclusion

The Company's Code of Conduct prohibits unlawful discrimination in employment relationships, granting all people the right to apply for a position in Tenaris, or to be considered for a new position based on merit, without arbitrary discrimination. The Company's Human Resources Policy champions equal opportunities by ensuring that hiring, promotion, transfer, notice periods, dialogue, rights and protection, as well as other employment decisions are taken without regard for race, color, religious belief, gender, age, disability, national origin or sexual orientation. Compensation and remuneration are based on each person's duties, personal performance, competence and behavior. Tenaris pursues a policy of inclusive corporate culture and leadership, recognizing the range of benefits brought by embracing diversity in all its aspects, from gender to nationality and age. Specifically, we are making headway in our drive to improve the gender balance, in the knowledge that tackling the male-dominated traditions prevalent in the steel industry will contribute positively to our performance culture.

Summary of differences with NYSE standards

As a Luxembourg company listed on the NYSE, the Bolsa Mexicana de Valores, S.A. de C.V. (the Mexican Stock Exchange), and the Borsa Italiana S.p.A. (the Italian Stock Exchange), the Company is required to comply with some, but not all, of the corporate governance standards of these exchanges. The Company, however, believes that its corporate governance practices meet, in all material respects, the corporate governance standards that are generally required for controlled companies by all of the exchanges on which the Company's securities trade.

The following is a summary of the significant ways that the Company's corporate governance practices differ from the corporate governance standards required for foreign controlled companies by the NYSE. The Company's corporate governance practices may differ in non-material ways from certain other standards required by the NYSE that are not detailed here.

Non-management directors' meetings

Under NYSE standards, non-management directors must meet at regularly scheduled executive sessions without management present and, if such group includes directors who are not independent, a meeting should be scheduled once per year including only independent directors. Neither Luxembourg law nor the Company's articles of association require the holding of such meetings and the Company does not have a set policy for these meetings. For additional information on board meetings, see "Directors, Senior Management and Employees – Directors and Senior Management – Board of Directors".

In addition, NYSE-listed companies are required to provide a method for interested parties to communicate directly with non-management directors as a group. While the Company does not have such a method, it has set up a compliance line for investors and other interested parties to communicate their concerns directly to the members of our audit committee, all of whom are non-management, independent directors.

Audit committee composition

Under NYSE standards, listed U.S. companies are required to have an audit committee composed of independent directors that satisfy the requirements of Rule 10A-3 promulgated under the Exchange Act. Pursuant to the Company's articles of association, as supplemented by the audit committee's charter, for as long as the Company's shares are listed on at least one regulated market, the Company must have an audit committee composed of at least three members, the majority of whom must qualify as independent directors (as defined in the Company's articles of association), provided, however, that the composition and membership of the audit committee shall satisfy such requirements as are applicable to, and mandatory for, audit committees of issuers such as the Company under any law, rule or regulation applicable to the Company (including, without limitation, the applicable laws, rules and regulations of such regulated market or markets). The Company's audit committee, which currently consists of four members, complies with such requirements. In accordance with NYSE standards, the Company has an audit committee entirely composed of independent directors for purposes of the Exchange Act Rule 10A-3(b)(1). For more information on the Company's audit committee see "Directors, Senior Management and Employees– Board Practices – Audit Committee".

Under NYSE standards, all audit committee members of listed U.S. companies are required to be financially literate or must acquire such financial knowledge within a reasonable period and at least one of its members shall have experience in accounting or financial administration. In addition, if a member of the audit committee is simultaneously a member of the audit committee of more than three public companies, and the listed company does not limit the number of audit committees on which its members may serve, then in each case the board must determine whether the simultaneous service would prevent such member from effectively serving on the listed company's audit committee and shall publicly disclose its decision. Luxembourg law provisions on audit committee membership require only that at least one member of the audit committee have competence in accounting or auditing matters. The board of directors of the Company has determined that Ms. Tiuba, the committee's chairperson, qualifies as "audit committee financial expert" under applicable SEC rules and has competence in accounting or auditing matters, as required by applicable Luxembourg law. In addition, the membership of the audit committee as a whole has sufficient relevant knowledge of the business and financial experience to properly discharge its functions. The audit committee has the authority, from time to time and as it deems necessary, to engage persons that meet all of the attributes of a financial expert as consultants. See "Audit Committee Financial Expert".

Standards for evaluating director independence

Under NYSE standards, the board is required, on a case-by-case basis, to express an opinion with regard to the independence or lack of independence of each individual director. Neither Luxembourg law nor the Company's articles of association requires that the board of directors express such an opinion. In addition, the definition of "independent" under the NYSE rules differs in some non-material respects from the definition contained in the Company's articles of association. For more information on the Company's independent directors and the definition of "independent" under the Company's articles of association see "Directors, Senior Management and Employees – Directors and Senior Management – Board of Directors" and "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Audit committee responsibilities

Pursuant to the Company's articles of association, the audit committee shall assist the board of directors in fulfilling its oversight responsibilities relating to the integrity of its consolidated financial statements, the effectiveness of its systems of internal control, risk management and internal audit over financial reporting and the independence and performance of the external auditors. The audit committee is required to review and, where applicable, approve material transactions between the Company or its subsidiaries and related parties and also perform the other duties entrusted to it by the board. The NYSE requires certain matters to be set forth in the audit committee charter of U.S. listed companies.

The Company's audit committee charter provides for many of the responsibilities that are expected from such bodies under the NYSE standard and in accordance with applicable Luxembourg law, including the Audit Reform Law; however, due to the Company's equity structure and holding company nature, the charter does not contain all such responsibilities, including provisions related to procedures for the receipt and treatment of complaints (although the Company has established such procedures), funding for payment of administrative expenses and compensation to advisors (although the audit committee has the authority to engage outside advisors), setting hiring policies for employees or former employees of external auditors, and an annual performance evaluation of the audit committee. For more information on the Company's audit committee see "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Standards for approval of related-party transactions

The Company is subject to Luxembourg laws governing approval and disclosure of material related party transactions, including the Shareholders' Rights Law; and the Company's articles of association and the Audit Committee charter require the Audit Committee to review material transactions with related parties to determine whether their terms are consistent with the interests of the Company and its shareholders and with market conditions. In addition, recently amended NYSE standard on related-party transactions requires all NYSE-listed companies' audit committees (or another independent body of the board of directors) to conduct a reasonable prior review and oversight of all related party transactions for potential conflicts of interest and to prohibit such a transaction if it determines it to be inconsistent with the interests of the company and its shareholders. The rule defines the term "related party transaction" by reference to the disclosure requirements for annual reports under the Exchange Act. The materiality threshold applicable to foreign private issuers differs to the one applicable to U.S. companies. For further details on the approval process for related party transactions, see "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Shareholder voting on equity compensation plans

Under NYSE standards, shareholders must be given the opportunity to vote on equity-compensation plans and material revisions thereto, except for employment inducement awards, certain grants, plans and amendments in the context of mergers and acquisitions, and certain specific types of plans. The Company does not currently offer equity-based compensation to its directors, senior management or employees, and therefore does not have a policy on this matter. For more information on directors' compensation see "Directors, Senior Management and Employees – Compensation".

The Shareholders' Rights Law requires the Company to adopt a Compensation Policy setting forth the principles and guidelines for purposes of determining the compensation payable to the members of the Company's board of directors and the managing director or chief executive officer. Such Compensation Policy must be submitted to the non-binding vote of the shareholders. In addition, the Shareholders' Rights Law provides that the Company must prepare an annual report describing the compensation paid to directors and the chief executive officer for the performance of their duties and submit such report to the shareholders for approval. The Compensation Policy and Compensation Report must be available on the Company's website. For more information on the Compensation Policy and the 2022 Compensation Report see "Directors, Senior Management and Employees – Compensation".

Disclosure of corporate governance guidelines

NYSE-listed companies must adopt and disclose corporate governance guidelines. Neither Luxembourg law nor the Company's articles of association require the adoption or disclosure of corporate governance guidelines. The Company's board of directors follows corporate governance guidelines consistent with its equity structure and holding company nature, but the Company has not codified them and therefore does not disclose them on its website.

Code of business conduct and ethics

Under NYSE standards, listed companies must 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. Neither Luxembourg law nor the Company's articles of association require the adoption or disclosure of such a code of conduct. The Company, however, has adopted a code of conduct that applies to all directors, officers and employees that is posted on its website and which complies with the NYSE's requirements, except that it does not require the disclosure of waivers of the code for directors and officers. In addition, it has adopted a supplementary code of ethics for senior financial officers, which is also posted on our website. See "Code of Ethics".

Chief Executive Officer certification

A chief executive officer of a U.S. company listed on the NYSE must annually certify that he or she is not aware of any violation by the company of NYSE corporate governance standards. In accordance with NYSE rules applicable to foreign private issuers, the Company's chief executive officer is not required to provide the NYSE with this annual compliance certification. However, in accordance with NYSE rules applicable to all listed companies, the Company's chief executive officer must promptly notify the NYSE in writing after any of our executive officers becomes aware of any noncompliance with any applicable provision of the NYSE's corporate governance standards. In addition, the Company must submit an executed written affirmation annually and an interim written affirmation upon the occurrence of any of the events listed in the foreign private issuer interim written affirmation form by the NYSE.

Financial Statements

For the Report of Independent Registered Public Accounting Firm (PCAOB ID 1328) see pages F-1 through F-3 of this annual report.

For the Financial Statements see pages F-4 through F-77 of this annual report.

EXHIBITS

Exhibit Number	Description
1.1	Updated and Consolidated Articles of Association of Tenaris S.A., dated as of June 2, 2020
2.1	Amended and Restated Deposit Agreement entered into between Tenaris S.A. and Deutsche Bank Trust Company Americas *
2.2	Description of Securities
8.1	List of Subsidiaries of Tenaris S.A.
12.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1	Statement Explaining Calculation of Ratios
15.2	Statement Explaining Alternative Performance Measures

* The Amended and Restated Deposit Agreement is incorporated by reference to the Registration Statement on Form F-6 filed by Tenaris S.A. on February 25, 2013 (File No. 333-186825).

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.

March 31, 2023

TENARIS S.A.

By /s/ Alicia Mndolo

Name: Alicia Mndolo

Title: Chief Financial Officer



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Tenaris S.A.

Opinions on the Consolidated Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Tenaris S.A. and its subsidiaries (the “Company”) as of 31 December 2022 and 2021, and the related consolidated income statements, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for each of the three years in the period ended 31 December 2022, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of 31 December 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of 31 December 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended 31 December 2022 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and International Financial Reporting Standards as adopted by the European Union. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of 31 December 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 15. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits.

We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

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Cabinet de révision agréé. Expert-comptable (autorisation gouvernementale n°10028256)
R.C.S. Luxembourg B 65 477 - TVA LU25482518



Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

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 (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) 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 a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.



Impairment assessment of goodwill

As described in Notes II.H, 5 and 11 to the consolidated financial statements, at 31 December 2022, the Company's goodwill balance was 1,085 million USD. Goodwill is subject to at least an annual impairment test, or is tested more frequently if events or circumstances indicate that its carrying amount value may be impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher between the asset's value in use and fair value less costs of disposal. The recoverable value was based on value in use. The value in use is calculated by discounting the estimated cash flows over a five-year period based on forecasts approved by management. For the subsequent years beyond the five-year period, a terminal value is calculated based on perpetuity considering a nominal growth rate. Management judgment is required to estimate discounted future cash flows. The main key assumptions used by management in estimating the value in use are the discount rate, growth rate, oil and gas prices, average number of active oil and gas drilling rigs and raw material costs.

The principal considerations for our determination that performing procedures relating to the impairment assessment of goodwill is a critical audit matter are (i) the significant judgment by management when developing the value in use; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the discount rate, growth rate, oil and gas prices, average number of active oil and gas drilling rigs and raw material costs; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's impairment assessment, including controls over management's analysis of impairment indicators and controls over the review of assumptions used and discounted cash flow calculations. These procedures also included, among others, (i) testing management's process for developing the value in use estimate; (ii) evaluating the appropriateness of the discounted cash flow model; (iii) testing the completeness and accuracy of the underlying data used in the model; and (iv) evaluating the reasonableness of the significant assumptions used by management related to the discount rate, growth rate, oil and gas prices, average number of active oil and gas drilling rigs and raw materials costs. Evaluating management's assumptions related to the growth rate, oil and gas prices, average number of active oil and gas drilling rigs and raw material costs involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the businesses; (ii) the consistency with external market and industry data and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow model and the discount rate assumption.

PricewaterhouseCoopers, Société coopérative
Represented by

Luxembourg, 31 March 2023

/s/ Gilles Vanderweyen
Gilles Vanderweyen

We have served as the Company's auditor since 2011.

CONSOLIDATED FINANCIAL STATEMENTS

For the years ended 2022, 2021 and 2020

TENARIS S.A.
26, Boulevard Royal - 4th Floor
L-2449 - Luxembourg
R.C.S. Luxembourg: B 85203



CONSOLIDATED INCOME STATEMENT

	Notes	Year ended December 31,		
		2022	2021	2020
Net sales	1	11,762,526	6,521,207	5,146,734
Cost of sales	2	(7,087,739)	(4,611,602)	(4,087,317)
Gross profit		4,674,787	1,909,605	1,059,417
Selling, general and administrative expenses	3	(1,634,575)	(1,206,569)	(1,119,227)
Impairment charge	5	(76,725)	(57,075)	(622,402)
Other operating income	6	104,497	68,245	33,393
Other operating expenses	6	(104,709)	(6,697)	(14,252)
Operating income (loss)		2,963,275	707,509	(663,071)
Finance income	7	80,020	38,048	18,387
Finance cost	7	(45,940)	(23,677)	(27,014)
Other financial results	7	(40,120)	8,295	(56,368)
Income (loss) before equity in earnings of non-consolidated companies and income tax		2,957,235	730,175	(728,066)
Equity in earnings of non-consolidated companies	13	208,702	512,591	108,799
Income (loss) before income tax		3,165,937	1,242,766	(619,267)
Income tax	8	(617,236)	(189,448)	(23,150)
Income (loss) for the year		2,548,701	1,053,318	(642,417)
Attributable to:				
Shareholders' equity		2,553,280	1,100,191	(634,418)
Non-controlling interests		(4,579)	(46,873)	(7,999)
		2,548,701	1,053,318	(642,417)
Earnings per share attributable to shareholders' equity during the year:				
Weighted average number of ordinary shares (thousands)		1,180,537	1,180,537	1,180,537
Basic and diluted earnings (losses) per share (U.S. dollars per share)		2.16	0.93	(0.54)
Basic and diluted earnings (losses) per ADS (U.S. dollars per ADS) (*)		4.33	1.86	(1.07)

(*) Each ADS equals two shares.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Year ended December 31,		
	2022	2021	2020
Income (loss) for the year	2,548,701	1,053,318	(642,417)
Items that may be subsequently reclassified to profit or loss:			
Currency translation adjustment	(23,710)	(81,953)	31,172
Reclassification of currency translation adjustment reserve (*)	(71,252)	-	-
Change in value of cash flow hedges and instruments at fair value	(5,186)	(1,178)	(9,832)
Income tax relating to components of other comprehensive income	-	(1,511)	2,376
From participation in non-consolidated companies:			
- Currency translation adjustment	7,336	(11,085)	(31,977)
- Changes in the fair value of derivatives held as cash flow hedges and others	1,435	13	792
	(91,377)	(95,714)	(7,469)
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefit obligations	13,577	14,648	(4,971)
Income tax on items that will not be reclassified	(2,673)	(5,137)	770
Remeasurements of post-employment benefit obligations of non-consolidated companies	3,588	3,829	634
	14,492	13,340	(3,567)
Other comprehensive (loss) for the year	(76,885)	(82,374)	(11,036)
Total comprehensive income (loss) for the year	2,471,816	970,944	(653,453)
Attributable to:			
Shareholders' equity	2,476,373	1,016,434	(643,435)
Non-controlling interests	(4,557)	(45,490)	(10,018)
	2,471,816	970,944	(653,453)

(*) During 2022 as a result of NKK Tubes' definitive cease of operations, the currency translation adjustment reserve belonging to the shareholders was reclassified to the income statement. For more information see note 35 "Other Information - Agreement to terminate NKK Tubes joint venture".

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Notes	At December 31, 2022		At December 31, 2021	
ASSETS					
Non-current assets					
Property, plant and equipment, net	10	5,556,263		5,824,801	
Intangible assets, net	11	1,332,508		1,372,176	
Right-of-use assets, net	12	111,741		108,738	
Investments in non-consolidated companies	13	1,540,646		1,383,774	
Other investments	19	119,902		320,254	
Derivative financial instruments	25	-		7,080	
Deferred tax assets	21	208,870		245,547	
Receivables, net	14	211,720	9,081,650	205,888	9,468,258
Current assets					
Inventories, net	15	3,986,929		2,672,593	
Receivables and prepayments, net	16	183,811		96,276	
Current tax assets	17	243,136		193,021	
Trade receivables, net	18	2,493,940		1,299,072	
Derivative financial instruments	25	30,805		4,235	
Other investments	19	438,448		397,849	
Cash and cash equivalents	19	1,091,527	8,468,596	318,127	4,981,173
Total assets			17,550,246		14,449,431
EQUITY					
Shareholders' equity			13,905,709		11,960,578
Non-controlling interests			128,728		145,124
Total equity			14,034,437		12,105,702
LIABILITIES					
Non-current liabilities					
Borrowings	20	46,433		111,432	
Lease liabilities	12	83,616		82,694	
Deferred tax liabilities	21	269,069		274,721	
Other liabilities	22 (i)	230,142		231,681	
Provisions	23	98,126	727,386	83,556	784,084
Current liabilities					
Borrowings	20	682,329		219,501	
Lease liabilities	12	28,561		34,591	
Derivative financial instruments	25	7,127		11,328	
Current tax liabilities	17	376,240		143,486	
Other liabilities	22 (ii)	260,614		203,725	
Provisions	24 (ii)	11,185		9,322	
Customer advances		242,910		92,436	
Trade payables		1,179,457	2,788,423	845,256	1,559,645
Total liabilities			3,515,809		2,343,729
Total equity and liabilities			17,550,246		14,449,431

Contingencies, commitments and restrictions on the distribution of profits are disclosed in note 26 to these Consolidated Financial Statements.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to owners of the parent						Total	Non-controlling interests	Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserves (2)	Retained Earnings (3)			
Balance at December 31, 2021	1,180,537	118,054	609,733	(1,051,133)	(336,200)	11,439,587	11,960,578	145,124	12,105,702
Income (loss) for the year	-	-	-	-	-	2,553,280	2,553,280	(4,579)	2,548,701
Currency translation adjustment	-	-	-	(23,632)	-	-	(23,632)	(78)	(23,710)
Reclassification of currency translation adjustment reserve ⁽⁴⁾	-	-	-	(71,252)	-	-	(71,252)	-	(71,252)
Remeasurements of post-employment benefit obligations, net of taxes	-	-	-	-	10,519	13	10,532	372	10,904
Change in value of instruments at fair value through other comprehensive income and cash flow hedges, net of taxes	-	-	-	-	(4,914)	-	(4,914)	(272)	(5,186)
From other comprehensive income of non-consolidated companies	-	-	-	7,336	5,023	-	12,359	-	12,359
Other comprehensive (loss) income for the year	-	-	-	(87,548)	10,628	13	(76,907)	22	(76,885)
Total comprehensive income (loss) for the year	-	-	-	(87,548)	10,628	2,553,293	2,476,373	(4,557)	2,471,816
Acquisition and other changes in non-controlling interests	-	-	-	-	-	-	-	(1,407)	(1,407)
Dividends paid in cash	-	-	-	-	-	(531,242)	(531,242)	(10,432)	(541,674)
Balance at December 31, 2022	1,180,537	118,054	609,733	(1,138,681)	(325,572)	13,461,638	13,905,709	128,728	14,034,437

- (1) The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. As of December 31, 2022 there were 1,180,536,830 shares issued. All issued shares are fully paid.
- (2) Other reserves include mainly the result of transactions with non-controlling interests that do not result in a loss of control, the remeasurement of post-employment benefit obligations, the changes in value of cash flow hedges and the changes in financial instruments measured at fair value through other comprehensive income.
- (3) The restrictions on the distribution of profits and payment of dividends according to Luxembourg Law are disclosed in note 26 (iii) to these Consolidated Financial Statements.
- (4) Related to NKK Tubes' cease of operations. For more information see note 35 "Other Relevant Information – Agreement to terminate NKK Tubes joint venture".

The accompanying notes are an integral part of these Consolidated Financial Statements.

	Attributable to owners of the parent							Non-controlling interests	Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserve (2)	Retained Earnings	Total		
Balance at December 31, 2020	1,180,537	118,054	609,733	(958,374)	(345,217)	10,658,155	11,262,888	183,585	11,446,473
Income (loss) for the year	-	-	-	-	-	1,100,191	1,100,191	(46,873)	1,053,318
Currency translation adjustment	-	-	-	(81,674)	-	-	(81,674)	(279)	(81,953)
Remeasurements of post-employment benefit obligations, net of taxes	-	-	-	-	9,813	(15)	9,798	(287)	9,511
Change in value of instruments at fair value through other comprehensive income and cash flow hedges, net of taxes	-	-	-	-	(4,638)	-	(4,638)	1,949	(2,689)
From other comprehensive income of non-consolidated companies	-	-	-	(11,085)	3,842	-	(7,243)	-	(7,243)
Other comprehensive (loss) income for the year	-	-	-	(92,759)	9,017	(15)	(83,757)	1,383	(82,374)
Total comprehensive income (loss) for the year	-	-	-	(92,759)	9,017	1,100,176	1,016,434	(45,490)	970,944
Acquisition and other changes in non-controlling interests ⁽³⁾	-	-	-	-	-	-	-	10,384	10,384
Dividends paid in cash	-	-	-	-	-	(318,744)	(318,744)	(3,355)	(322,099)
Balance at December 31, 2021	1,180,537	118,054	609,733	(1,051,133)	(336,200)	11,439,587	11,960,578	145,124	12,105,702

- (1) The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. As of December 31, 2021 there were 1,180,536,830 shares issued. All issued shares are fully paid.
- (2) Other reserves include mainly the result of transactions with non-controlling interests that do not result in a loss of control, the remeasurement of post-employment benefit obligations, the changes in value of cash flow hedges and the changes in financial instruments measured at fair value through other comprehensive income.
- (3) Mainly related to the agreement for the construction of Tenaris Baogang Baotou Steel Pipes Ltd.

The accompanying notes are an integral part of these Consolidated Financial Statements.

	Attributable to owners of the parent						Non-controlling		Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserves (2)	Retained Earnings	Total	interests	
Balance at December 31, 2019	1,180,537	118,054	609,733	(957,246)	(336,902)	11,374,782	11,988,958	197,414	12,186,372
(Loss) for the year	-	-	-	-	-	(634,418)	(634,418)	(7,999)	(642,417)
Currency translation adjustment	-	-	-	30,849	-	-	30,849	323	31,172
Remeasurements of post-employment benefit obligations, net of taxes	-	-	-	-	(4,664)	428	(4,236)	35	(4,201)
Change in value of instruments at fair value through other comprehensive income and cash flow hedges, net of taxes	-	-	-	-	(5,079)	-	(5,079)	(2,377)	(7,456)
From other comprehensive income of non-consolidated companies	-	-	-	(31,977)	1,426	-	(30,551)	-	(30,551)
Other comprehensive (loss) income for the year	-	-	-	(1,128)	(8,317)	428	(9,017)	(2,019)	(11,036)
Total comprehensive (loss) for the year	-	-	-	(1,128)	(8,317)	(633,990)	(643,435)	(10,018)	(653,453)
Acquisition and other changes in non-controlling interests ⁽³⁾	-	-	-	-	2	-	2	1,490	1,492
Dividends paid in cash	-	-	-	-	-	(82,637)	(82,637)	(5,301)	(87,938)
Balance at December 31, 2020	1,180,537	118,054	609,733	(958,374)	(345,217)	10,658,155	11,262,888	183,585	11,446,473

- (1) The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. As of December 31, 2021 and 2020 there were 1,180,536,830 shares issued. All issued shares are fully paid.
- (2) Other reserves include mainly the result of transactions with non-controlling interests that do not result in a loss of control, the remeasurement of post-employment benefit obligations, the changes in value of cash flow hedges and the changes in financial instruments measured at fair value through other comprehensive income.
- (3) Mainly related to the agreement for the construction of Tenaris Baogang Baotou Steel Pipes Ltd.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

	Notes	Year ended December 31,		
		2022	2021	2020
Cash flows from operating activities				
Income (loss) for the year		2,548,701	1,053,318	(642,417)
Adjustments for:				
Depreciation and amortization	10, 11 & 12	607,723	594,721	678,806
Impairment charge	5	76,725	57,075	622,402
Income tax accruals less payments	29(ii)	257,651	35,602	(117,214)
Equity in earnings of non-consolidated companies	13	(208,702)	(512,591)	(108,799)
Interest accruals less payments, net	29(iii)	1,480	(11,363)	(538)
Changes in provisions	23 & 24(ii)	16,433	7,381	(13,175)
Reclassification of currency translation adjustment reserve (*)	6 & 35	(71,252)	-	-
Result of sale of subsidiaries	6	-	(6,768)	-
Changes in working capital (**)	29(i)	(2,131,245)	(1,071,464)	1,055,289
Currency translation adjustment and others		69,703	(26,836)	46,029
Net cash provided by operating activities		1,167,217	119,075	1,520,383
Cash flows from investing activities				
Capital expenditures	10 & 11	(378,446)	(239,518)	(193,322)
Changes in advance to suppliers of property, plant and equipment		(18,901)	(5,075)	(1,031)
Proceeds from sale of subsidiaries, net of cash	6	-	24,332	-
Acquisition of subsidiaries, net of cash acquired	33	(4,082)	-	(1,025,367)
Investment in companies under cost method		-	(692)	-
Proceeds from disposal of property, plant and equipment and intangible assets		48,458	22,735	14,394
Dividends received from non-consolidated companies	13	66,162	75,929	278
Changes in investments in securities		123,254	390,186	(887,216)
Net cash (used in) provided by investing activities		(163,555)	267,897	(2,092,264)
Cash flows from financing activities				
Dividends paid	9	(531,242)	(318,744)	(82,637)
Dividends paid to non-controlling interest in subsidiaries		(10,432)	(3,355)	(5,301)
Changes in non-controlling interests		(1,407)	-	2
Payments of lease liabilities	12	(52,396)	(48,473)	(48,553)
Proceeds from borrowings		1,511,503	843,668	658,156
Repayments of borrowings		(1,094,370)	(1,121,053)	(896,986)
Net cash used in financing activities		(178,344)	(647,957)	(375,319)
Increase (decrease) in cash and cash equivalents		825,318	(260,985)	(947,200)
Movement in cash and cash equivalents				
At the beginning of the year		318,067	584,583	1,554,275
Effect of exchange rate changes		(51,952)	(5,531)	(22,492)
Increase (decrease) in cash and cash equivalents		825,318	(260,985)	(947,200)
At December 31,		1,091,433	318,067	584,583
At December 31,				
Cash and cash equivalents		2022	2021	2020
Cash and bank deposits	19	1,091,527	318,127	584,681
Bank overdrafts	20	(94)	(60)	(98)
		1,091,433	318,067	584,583

(*) Related to NKK Tubes' cease of operations. For more information see note 35 "Other Information – Agreement to terminate NKK Tubes joint venture".

(**) Changes in working capital do not include non-cash movements due to the variations in the exchange rates used by subsidiaries with functional currencies different from the U.S. dollar for an amount of \$4.2 million for 2022, \$25.6 million for 2021 and \$3.8 million for 2020.

The accompanying notes are an integral part of these Consolidated Financial Statements.

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I. GENERAL INFORMATION

Tenaris S.A. (the “Company”) was established as a public limited liability company (*société anonyme*) under the laws of the Grand-Duchy of Luxembourg on December 17, 2001. The Company holds, either directly or indirectly, controlling interests in various subsidiaries in the steel pipe manufacturing and distribution businesses. References in these Consolidated Financial Statements to “Tenaris” refer to the Company and its consolidated subsidiaries. A list of the principal Company’s subsidiaries is included in note 32 to these Consolidated Financial Statements.

The Company’s shares trade on the Italian Stock Exchange and the Mexican Stock Exchange; and the Company’s American Depositary Securities (“ADS”) trade on the New York Stock Exchange.

These Consolidated Financial Statements were approved for issuance by the Company’s Board of Directors on February 15, 2023.

II. ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these Consolidated Financial Statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

A Basis of presentation

The Consolidated Financial Statements of Tenaris have been prepared in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”) and in accordance with IFRS as adopted by the European Union, under the historical cost convention, as modified by the revaluation of certain financial assets and liabilities (including derivative instruments) and plan assets at fair value. The Consolidated Financial Statements are, unless otherwise noted, presented in thousands of U.S. dollars (“\$”).

Whenever necessary, certain comparative amounts have been reclassified to conform to changes in presentation in the current year.

The preparation of Consolidated Financial Statements in conformity with IFRS requires management to make certain accounting estimates and assumptions that might affect among others, the reported amounts of assets, liabilities, contingent liabilities, revenues and expenses. Actual results may differ from these estimates. The main areas involving significant estimates or judgements are: impairment of goodwill and long-lived assets (notes II.H), impairment in investments in associates (note II.B); income taxes (note II.O); obsolescence of inventory (note II.J); contingencies (note II.Q); allowance for trade receivables (note II.K); post-employment and other long-term benefits (note II.P); business combinations (notes II.B); useful lives of property, plant and equipment and other long-lived assets (notes II.E, II.F, II.H); fair value estimation of certain financial instruments (notes III.B, IV.34) and property title ownership restriction (note IV.27). During the year there were no material changes in the significant accounting estimates and judgements.

(1) Accounting pronouncements applicable as from January 1, 2022

Accounting pronouncements that became effective during 2022 have no material effect on the Company’s financial condition or results of operations.

(2) New accounting pronouncements not applicable as of December 31, 2022

Certain newly published accounting standards, amendments to accounting standards and interpretations are not mandatory for December 31, 2022 reporting periods and have not been early adopted by the Company. These standards, amendments or interpretations are not expected to have a material impact in the current or future reporting periods and on foreseeable future transactions.

B Group accounting**(1) Subsidiaries and transactions with non-controlling interests**

Subsidiaries are all entities over which Tenaris has control. Tenaris controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is exercised by the Company and are no longer consolidated from the date control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by Tenaris. The cost of an acquisition is measured as the fair value of the assets transferred, equity instruments issued and liabilities incurred or assumed at the date of exchange. Acquisition-related costs are expensed as incurred. Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are generally measured initially at their fair values at the acquisition date. Any non-controlling interest in the acquiree is measured either at fair value or at the non-controlling interest's proportionate share of the acquiree's net identifiable assets. The excess of the aggregate of the consideration transferred and the amount of any non-controlling interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the Consolidated Income Statement.

Contingent consideration is classified either as equity or as a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognized in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in profit or loss.

Transactions with non-controlling interests that do not result in a loss of control are accounted as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Company ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

Material intercompany transactions, balances and unrealized gains (losses) on transactions between Tenaris subsidiaries have been eliminated in consolidation. However, since the functional currency of some subsidiaries is its respective local currency, some financial gains (losses) arising from intercompany transactions are generated. These are included in the Consolidated Income Statement under *Other financial results*.

(2) Non-consolidated companies

Non-consolidated companies are all entities in which Tenaris has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in non-consolidated companies (associates and joint ventures) are accounted for by the equity method of accounting and are initially recognized at cost (as defined by IAS 28, "Investments in Associates and Joint Ventures"). The Company's investment in non-consolidated companies includes goodwill identified in acquisition, net of any accumulated impairment loss.

Under the equity method of accounting, the investments are initially recognized at cost and adjusted thereafter to recognize Tenaris's share of the post-acquisition profits or losses of the investee in profit or loss, and Tenaris's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognized as a reduction in the carrying amount of the investment.

If material, unrealized results on transactions between Tenaris and its non-consolidated companies are eliminated to the extent of Tenaris's interest in the non-consolidated companies. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment indicator of the asset transferred. Financial statements of non-consolidated companies are adjusted where necessary to ensure consistency with IFRS.

The Company's pro-rata share of earnings in non-consolidated companies is recorded in the Consolidated Income Statement under *Equity in earnings of non-consolidated companies*. The Company's pro-rata share of changes in other comprehensive income is recognized in the Consolidated Statement of Comprehensive Income.

a) Ternium

At December 31, 2022, Tenaris held 11.46% of Ternium S.A. ("Ternium") common stock. The following factors and circumstances evidence that Tenaris has significant influence over Ternium:

- Both the Company and Ternium are under the indirect common control of San Faustin S.A. ("San Faustin");
- Four out of nine members of Ternium's Board of Directors (including Ternium's Chairman) are also members of the Company's Board of Directors;
- Under the shareholders' agreement by and between the Company and Techint Holdings S.à.r.l, a wholly owned subsidiary of San Faustin and Ternium's main shareholder, dated January 9, 2006, Techint Holdings S.à.r.l, is required to take actions within its power to cause (a) one of the members of Ternium's Board of Directors to be nominated by the Company and (b) any director nominated by the Company to be removed from Ternium's Board of Directors only pursuant to previous written instructions of the Company.

b) Usiminas

At December 31, 2022, Tenaris held, through its Brazilian subsidiary Confab Industrial S.A. ("Confab"), 36.5 million ordinary shares and 1.3 million preferred shares of Usinas Siderúrgicas de Minas Gerais S.A. - Usiminas ("Usiminas"), representing 5.19% of its shares with voting rights and 3.07% of its total share capital.

Confab's acquisition of the Usiminas shares was part of a larger transaction performed on January 16, 2012, pursuant to which Tenaris's affiliate Ternium (through certain of its subsidiaries) and Confab acquired a large block of Usiminas ordinary shares and joined Usiminas' existing control group. Subsequently, in 2016, Ternium and Confab subscribed to additional ordinary shares and to preferred shares.

At December 31, 2022, the Usiminas control group held, in the aggregate, 483.6 million ordinary shares bound to the Usiminas shareholders' agreement, representing approximately 68.6% of Usiminas' voting capital. The Usiminas control group, which is bound by a long-term shareholders' agreement that governs the rights and obligations of Usiminas' control group members, is currently composed of three sub-groups: the T/T Group, comprising Confab and certain Ternium entities; the NSC Group, comprising Nippon Steel Corporation ("NSC"), Metal One Corporation and Mitsubishi Corporation; and Usiminas' pension fund Previdência Usiminas. The T/T Group holds approximately 47.1% of the total shares held by the control group (39.5% corresponding to the Ternium entities and the other 7.6% corresponding to Confab); the NSC Group holds approximately 45.9% of the total shares held by the control group; and Previdência Usiminas holds the remaining 7%.

The corporate governance rules reflected in the Usiminas shareholders agreement include, among others, an alternation mechanism for the nomination of each of the Chief Executive Officer ("CEO") and the Chairman of the Board of Directors of Usiminas, as well as a mechanism for the nomination of other members of Usiminas' executive board. The Usiminas shareholders agreement also provides for an exit mechanism consisting of a buy-and-sell procedure (exercisable at any time after November 16, 2022, and applicable with respect to shares held by NSC and the T/T Group), which would allow either Ternium or NSC to purchase all or a majority of the Usiminas shares held by the other shareholder.

Confab and the Ternium entities party to the Usiminas shareholders agreement have a separate shareholders agreement governing their respective rights and obligations as members of the T/T Group. Such separate agreement includes, among others, provisions granting Confab certain rights relating to the T/T Group's nomination of Usiminas' officers and directors under the Usiminas shareholders agreement. Those circumstances evidence that Tenaris has significant influence over Usiminas.

c) *Techgen*

Techgen S.A. de C.V. (“Techgen”), which operates an electric power plant in Mexico, is a joint venture company owned 48% by Ternium, 30% by Tecpetrol International S.A. (“Tecpetrol”) and 22% by Tenaris. The Company, Ternium and Tecpetrol are parties to a shareholders’ agreement relating to the governance of Techgen and are under the indirect common control of San Faustin. Based on the facts stated above, the Company has determined that it has significant influence over this entity.

d) *Global Pipe Company*

Global Pipe Company (“GPC”) is a Saudi-German joint venture, established in 2010 and located in Jubail, Saudi Arabia, which manufactures LSAW pipes. Tenaris, through its subsidiary Saudi Steel Pipe Company (“SSPC”), currently owns 35% of the share capital of GPC. In accordance with GPC’s bylaws, SSPC’s 35% equity interest entitles SSPC to appoint four of the eleven members of the Board of Directors of GPC. In addition, SSPC has the ability to block any shareholder resolution. Based on the facts stated above, the Company has determined that it has significant influence over this entity.

Tenaris carries its investments in non-consolidated companies under the equity method, with no additional goodwill or intangible assets recognized. Tenaris reviews investments in non-consolidated companies for impairment whenever events or changes in circumstances indicate that the asset’s carrying amount may not be recoverable. For more information see note 13 to these Consolidated Financial Statements.

C Segment information

The Company is organized in one major business segment, Tubes, which is also the reportable operating segment. All other business activities and operating segments that are not required to be separately reported, are disclosed in the Other segment.

The Tubes segment includes the production and sale of both seamless and welded steel tubular products and related services mainly for the oil and gas industry, particularly oil country tubular goods (“OCTG”) used in drilling operations, and for other industrial applications with production processes that consist in the transformation of steel into tubular products. Business activities included in this segment are mainly dependent on the oil and gas industry worldwide, as this industry is a major consumer of steel pipe products, particularly OCTG used in drilling activities. Demand for steel pipe products from the oil and gas industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells. Sales are generally made to end users, with exports being done through a centrally managed global distribution network and domestic sales are made through local subsidiaries.

The Other segment includes all business activities related to the production and selling of sucker rods, industrial equipment, coiled tubing, tubes used for plumbing applications, oilfield / hydraulic fracturing services, energy and raw materials that exceed internal requirements.

Tenaris’s Chief Operating Decision Maker (“CODM”) holds monthly meetings with senior management, in which operating and financial performance information is reviewed. This information differs from IFRS principally as follows:

- The use of direct cost methodology to calculate the inventories, while under IFRS it is at full cost, including absorption of production overheads and depreciations;
- The use of costs based on previously internally defined cost estimates, while, under IFRS, costs are calculated at historical cost, mainly on a FIFO basis;
- Any currency translation adjustment reclassification, when applicable, for companies that under IFRS had a different functional currency than the U.S. dollar;
- Other timing differences, if any.

Tenaris presents its geographical information in five areas: North America, South America, Europe, Middle East and Africa and Asia Pacific. For purposes of reporting geographical information, net sales are allocated to geographical areas based on the customer’s location; allocation of assets, capital expenditures and associated depreciations and amortizations are based on the geographical location of the assets.

D Foreign currency translation**(1) Functional and presentation currency**

IAS 21 (revised), “The effects of changes in foreign exchange rates” defines the functional currency as the currency of the primary economic environment in which an entity operates.

The functional and presentation currency of the Company is the U.S. dollar. The U.S. dollar is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Tenaris’s global operations.

Starting January 1, 2023, the Company changed the functional currency of its Brazilian subsidiaries, from the Brazilian Real to the U.S. dollar.

This decision is a result of a significant increase of its Brazilian Subsidiaries’ participation in the OCTG and line pipe international markets, a trend which started in recent years and has been strengthened in 2022, an increased level of integration of the local operations within Tenaris’s international commercial and supply chain system, as well as the fact that the main purchase agreement contracts and the long term sales agreement contracts with major international and local oil companies are both indexed to the U.S. dollar. Local steel prices are also being affected by the U.S. dollar / Brazilian Real fluctuations.

As a result of this change, except for the Italian subsidiaries whose functional currency is the Euro, Tenaris determined that the functional currency of its other subsidiaries is the U.S. dollar, based on the following principal considerations:

- Sales are mainly negotiated, denominated and settled in U.S. dollars. If priced in a currency other than the U.S. dollar, the sales price may consider exposure to fluctuation in the exchange rate against the U.S. dollar;
- Prices of their critical raw materials and inputs are priced and / or settled in U.S. dollars;
- Transaction and operational environment and the cash flow of these operations have the U.S. dollar as reference currency;
- Significant level of integration of the local operations within Tenaris’s international global distribution network;
- Net financial assets and liabilities are mainly received and maintained in U.S. dollars;
- The exchange rate of certain legal currencies has long-been affected by recurring and severe economic crises.

(2) Transactions in currencies other than the functional currency

Transactions in currencies other than the functional currency are translated into the functional currency using the exchange rates prevailing at the date of the transactions or valuation where items are re-measured.

At the end of each reporting period: (i) monetary items denominated in currencies other than the functional currency are translated using the closing rates; (ii) non-monetary items that are measured in terms of historical cost in a currency other than the functional currency are translated using the exchange rates prevailing at the date of the transactions; and (iii) non-monetary items that are measured at fair value in a currency other than the functional currency are translated using the exchange rates prevailing at the date when the fair value was determined.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in currencies other than the functional currency are recorded as gains and losses from foreign exchange and included in *Other financial results* in the Consolidated Income Statement, except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges.

(3) Translation of financial information in currencies other than the functional currency

Results of operations for subsidiaries whose functional currencies are not the U.S. dollar are translated into U.S. dollars at the average exchange rates for each quarter of the year. Financial statement positions are translated at the year-end exchange rates. Translation differences are recognized in a separate component of equity as currency translation adjustments. In the case of a sale or other disposal of any of such subsidiaries, any accumulated translation difference would be recognized in the Consolidated Income Statement as a gain or loss from the sale following IAS 21.

Goodwill and fair value adjustments arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

E Property, plant and equipment

Property, plant and equipment are recognized at historical acquisition or construction cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Property, plant and equipment acquired through acquisitions accounted for as business combinations have been valued initially at the fair market value of the assets acquired.

Major overhaul and rebuilding expenditures are capitalized as property, plant and equipment only when it is probable that future economic benefits associated with the item will flow to the Company and the investment enhances the condition of assets beyond its original condition. The carrying amount of the replaced part is derecognized. Maintenance expenses on manufacturing properties are recorded as cost of products sold in the year in which they are incurred.

Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Borrowing costs that are attributable to the acquisition or construction of certain capital assets are capitalized as part of the cost of the asset, in accordance with IAS 23 (revised), "Borrowing Costs". Assets for which borrowing costs are capitalized are those that require a substantial period of time to prepare for their intended use.

The depreciation method is reviewed at each year end. Depreciation is calculated using the straight-line method to depreciate the cost of each asset to its residual value over its estimated useful life, as follows:

Land	No Depreciation
Buildings and improvements	30-50 years
Plant and production equipment	10-40 years
Vehicles, furniture and fixtures, and other equipment	4-10 years

The assets' residual values and useful lives of significant plant and production equipment are reviewed and adjusted, if appropriate, at each year-end date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Management's re-estimation of assets useful lives, performed in accordance with IAS 16, "Property, Plant and Equipment", resulted in additional depreciation expenses of approximately \$39 million for 2022, of \$45 million for 2020 and did not materially affect depreciation expenses for 2021.

Tenaris depreciates each significant part of an item of property, plant and equipment for its different production facilities that (i) can be properly identified as an independent component with a cost that is significant in relation to the total cost of the item, and (ii) has a useful operating life that is different from another significant part of that same item of property, plant and equipment.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of assets and are recognized under *Other operating income* or *Other operating expenses* in the Consolidated Income Statement.

F Intangible assets**(1) Goodwill**

Goodwill represents the excess of the acquisition cost over the fair value of Tenaris's share of net identifiable assets acquired as part of business combinations determined mainly by independent valuations. Goodwill is tested at least annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Goodwill is included in the Consolidated Statement of Financial Position under *Intangible assets, net*.

For the purpose of impairment testing, goodwill is allocated to a cash generating unit ("CGU") or group of CGUs that are expected to benefit from the business combination which generated the goodwill being tested.

(2) Information systems projects

Costs associated with maintaining computer software programs are generally recognized as an expense as incurred. However, costs directly related to the development, acquisition and implementation of information systems are recognized as intangible assets if it is probable that they have economic benefits exceeding one year and comply with the recognition criteria of IAS 38, "Intangible Assets".

Information systems projects recognized as assets are amortized using the straight-line method over their useful lives, generally not exceeding a period of 3 years. Amortization charges are mainly classified as *Selling, general and administrative expenses* in the Consolidated Income Statement.

Management's re-estimation of assets useful lives, performed in accordance with IAS 38, did not materially affect amortization expenses for 2022 and 2021 and resulted in additional amortization expenses of \$11.1 million for 2020.

(3) Licenses, patents, trademarks and proprietary technology

Licenses, patents, trademarks, and proprietary technology acquired in a business combination are initially recognized at fair value at the acquisition date. Licenses, patents, proprietary technology and those trademarks that have a finite useful life are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method to allocate the cost over their estimated useful lives, which are in the range between 3 and 10 years. Amortization charges are mainly classified as *Cost of Sales* in the Consolidated Income Statement.

The balance of acquired trademarks that have indefinite useful lives according to external appraisal amounts to \$86.7 million at December 31, 2022, 2021 and 2020, and are included in Hydril CGU. Main factors considered in the determination of the indefinite useful lives include the years that they have been in service and their recognition among customers in the industry.

Management's re-estimation of assets useful lives, performed in accordance with IAS 38, did not materially affect amortization expenses for 2022, 2021 and 2020.

(4) Research and development

Research expenditures as well as development costs that do not fulfill the criteria for capitalization are recorded as *Cost of sales* in the Consolidated Income Statement as incurred. Research and development expenditures included in *Cost of sales* for the years 2022, 2021 and 2020 totaled \$50.7 million, \$45.3 million and \$41.8 million, respectively.

Capitalized costs were not material for the years 2022, 2021 and 2020.

(5) Customer relationships

In accordance with IFRS 3, "Business Combinations" and IAS 38, Tenaris has recognized the value of customer relationships separately from goodwill attributable to the acquisition of Maverick Tube Corporation ("Maverick") and Hydril Company ("Hydril") groups, as well as the more recent acquisitions of SSPC and Ipsco Tubulars Inc. ("IPSCO").

Customer relationships acquired in a business combination are recognized at fair value at the acquisition date, have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight line method over the initial expected useful lives which were approximately 14 years for Maverick, 10 years for Hydril, 9 years for SSPC and 3 years for IPSCO.

In 2022, the Company has reviewed the useful life of SSPC's customer relationships and decided to reduce it from 5 years to 3 years, consequently a higher amortization charge of approximately \$4.1 million was recorded in the Consolidated Income Statement under *Selling, general and administrative expenses* for the year ended December 31, 2022.

Management's re-estimation of assets useful lives, performed in accordance with IAS 38, did not affect amortization expenses for 2021 and 2020.

As of December 31, 2022 the net book value of SSPC's customer relationship amounts to \$41.5 million, with a residual useful life of 3 years, while IPSCO's, Maverick's and Hydril's customer relationships are fully amortized.

G Right-of-use assets and lease liabilities

Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the lease term on a straight-line basis.

Lease liabilities include the net present value of i) fixed payments, less any lease incentives receivable, ii) variable lease payments that are based on an index or a rate, iii) amounts expected to be payable by the lessee under residual value guarantees, iv) the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and v) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the amount of the initial measurement of lease liability, any lease payments made at or before the commencement date less any lease incentives received and any initial direct costs incurred by the lessee.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option or early termination, or not to exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Payments associated with short-term leases, variable leases and leases of low value assets are recognized on a straight-line basis as expenses in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

H Impairment of non-financial assets

Long-lived assets including identifiable intangible assets are reviewed for impairment at the lowest level for which there are separately identifiable cash flows (CGU). Most of the Company's principal subsidiaries that constitute a CGU have a single main production facility and, accordingly, each of such subsidiaries represents the lowest level of asset aggregation that generates largely independent cash inflows.

Assets that are subject to amortization or depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Intangible assets with indefinite useful lives, including goodwill, are subject to at least an annual impairment test, or are tested more frequently if events or circumstances indicate that the carrying amount value may be impaired. In some circumstances where there have not been significant changes to CGU assets and liabilities as well as external and internal events which could materially alter the recoverable amount of the CGU, the most recent detailed calculation of recoverable amount made in a preceding period may be used in the impairment test for that CGU in the current period.

In assessing whether there is any indication that a CGU may be impaired, external and internal sources of information are analyzed. Material facts and circumstances specifically considered in the analysis usually include the discount rate used in Tenaris's cash flow projections and the business condition in terms of competitive, economic and regulatory factors, such as the cost of raw materials, oil and gas prices, and the evolution of the rig count.

An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher between the asset's value in use and fair value less costs of disposal. Any impairment loss is allocated to reduce the carrying amount of the assets of the CGU in the following order:

- (a) first, to reduce the carrying amount of any goodwill allocated to the CGU; and
- (b) then, to the other assets of the unit (group of units) pro-rata on the basis of the carrying amount of each asset in the unit (group of units), considering not to reduce the carrying amount of the asset below the highest of its fair value less cost of disposal, its value in use or zero.

Value in use is calculated by discounting the estimated cash flows over a five year period (or higher if the period can be justified) based on forecasts approved by management. For the subsequent years beyond the five-year period, a terminal value is calculated based on perpetuity considering a nominal growth rate of 2% taking into account among others, mainly the historical inflation rate.

For purposes of calculating the fair value less costs of disposal, Tenaris uses the estimated value of future cash flows that a market participant could generate from the corresponding CGU.

Management judgment is required to estimate discounted future cash flows. Actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using discounting techniques.

Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal at each reporting date. For more information on impairment charges see note 5 to these Consolidated Financial Statements.

I Other investments

Other investments consist primarily of investments in financial instruments and time deposits with a maturity of more than three months at the date of purchase.

Certain non-derivative financial assets that the Company held not for trading have been categorized as financial assets at fair value through other comprehensive income ("FVOCI"), as the business model objective is achieved by both holding financial assets in order to collect contractual cash flows and selling financial assets. They are carried at fair value and interest income from these financial assets is included in finance income using the effective interest rate method. Unrealized gains or losses are recorded as a fair value adjustment in the Consolidated Statement of Comprehensive Income and transferred to the Consolidated Income Statement when the financial asset is sold. Exchange gains and losses and impairments related to the financial assets are immediately recognized in the Consolidated Income Statement. FVOCI instruments with maturities greater than 12 months after the balance sheet date are included in non-current assets.

Other investments in financial instruments and time deposits are categorized as financial assets at fair value through profit or loss ("FVPL") because such investments are held for trading and their performance is evaluated on a fair value basis. The results of these investments are recognized in *Financial Results* in the Consolidated Income Statement.

Purchases and sales of financial investments are recognized as of their settlement date.

The fair values of quoted investments are generally based on current bid prices. If the market for a financial investment is not active or the securities are not listed, Tenaris estimates the fair value by using standard valuation techniques. See section III Financial Risk Management.

J Inventories

Inventories are stated at the lower between cost and net realizable value. The cost of finished goods and goods in process is comprised of raw materials, direct labor, utilities, freights and other direct costs and related production overhead costs, and it excludes borrowing costs. The allocation of fixed production costs, including depreciation and amortization charges, is based on the normal level of production capacity. Inventories cost is mainly based on the FIFO method. Tenaris estimates net realizable value of inventories by grouping, where applicable, similar or related items. Net realizable value is the estimated selling price in the ordinary course of business, less any estimated costs of completion and selling expenses. Goods in transit as of year-end are valued based on the supplier's invoice cost.

Tenaris establishes an allowance for obsolete or slow-moving inventories related to finished goods, goods in process, supplies and spare parts. For slow moving or obsolete finished products, an allowance is established based on management's analysis of product aging. An allowance for obsolete and slow-moving inventory of supplies and spare parts is established based on management's analysis of such items to be used as intended and the consideration of potential obsolescence due to technological changes, aging and consumption patterns.

K Trade and other receivables

Trade and other receivables are recognized initially at fair value that corresponds to the amount of consideration that is unconditional unless they contain significant financing components. The Company holds trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method. Due to the short-term nature, their carrying amount is considered to be the same as their fair value.

Tenaris applies the IFRS 9 "Financial Instruments" simplified approach to measure expected credit losses, which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on the payment profiles of sales over a period of three years and the corresponding historical credit losses experienced within this period. The expected loss allowance also reflects current and forward-looking information on macroeconomic factors affecting the ability of each customer to settle the receivables.

L Cash and cash equivalents

Cash and cash equivalents are comprised of cash at banks, liquidity funds and short-term investments with a maturity of less than three months at the date of purchase which are readily convertible to known amounts of cash. Assets recorded in cash and cash equivalents are carried at fair market value or at historical cost which approximates fair market value.

In the Consolidated Statement of Financial Position, bank overdrafts are included in *Borrowings* in current liabilities.

For the purposes of the Consolidated Statement of Cash Flows, *Cash and cash equivalents* includes overdrafts.

M Equity**(1) Equity components**

The Consolidated Statement of Changes in Equity includes:

- The value of share capital, legal reserve, share premium and other distributable reserves calculated in accordance with Luxembourg law;
- The currency translation adjustment, other reserves, retained earnings and non-controlling interest calculated in accordance with IFRS.

(2) Share capital

The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. Total ordinary shares issued and outstanding as of December 31, 2022, 2021 and 2020 are 1,180,536,830 with a par value of \$1.00 per share with one vote each. All issued shares are fully paid.

(3) Dividends distribution by the Company to shareholders

Dividends distributions are recorded in the Company's financial statements when Company's shareholders have the right to receive the payment, or when interim dividends are approved by the Board of Directors in accordance with the by-laws of the Company.

Dividends may be paid by the Company to the extent that it has distributable retained earnings, calculated in accordance with Luxembourg law. See note 26 (iii) to these Consolidated Financial Statements.

N Borrowings

Borrowings are recognized initially at fair value net of transaction costs incurred and subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method.

O Current and deferred income tax

The income tax expense or credit for the period is the tax payable or recoverable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses. Tax is recognized in the Consolidated Income Statement, except for tax items recognized in other comprehensive income or directly in equity.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the reporting date in the countries where the Company's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions when appropriate.

Deferred income tax is recognized applying the liability method on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. The temporary differences arise mainly from the effect of currency translation on depreciable fixed assets and inventories, depreciation on property, plant and equipment, valuation of inventories, provisions for post-employment benefits and other long-term employee benefits, fair value adjustments of assets acquired in business combinations and net operating loss carry-forwards. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the time period when the asset is realized or the liability is settled, based on tax laws that have been enacted or substantively enacted at the reporting date.

Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Company measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

Deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the temporary differences can be utilized. At the end of each reporting period, Tenaris reassesses unrecognized deferred tax assets. Tenaris recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable income will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax basis of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

Deferred tax assets and liabilities are re-measured if tax rates change. These amounts are charged or credited to the Consolidated Income Statement or to the item *Other comprehensive income* in the Consolidated Statement of Comprehensive Income, depending on the account to which the original amount was charged or credited.

P Employee benefits**(1) Short-term obligations**

Liabilities for wages and salaries are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheet.

(2) Post-employment benefits

The Company has defined benefit and defined contribution plans. A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets, if any. The defined benefit obligation is calculated annually (at year end) by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash flows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in *Other comprehensive income* in the period in which they arise. Past-service costs are recognized immediately in the Income Statement.

For defined benefit funded plans, net interest income / expense is calculated based on the surplus or deficit derived by the difference between the defined benefit obligations less fair value of plan assets. For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

Tenaris sponsors funded and unfunded defined benefit pension plans in certain subsidiaries. The most significant are:

- An unfunded defined benefit employee retirement plan for certain senior officers. The plan is designed to provide certain benefits to those officers (additional to those contemplated under applicable labor laws) in case of termination of the employment relationship due to certain specified events, including retirement. This unfunded plan provides defined benefits based on years of service and final average salary. As of December 31, 2022 the outstanding liability for this plan amounts to \$43.1 million.
- Employees' service rescission indemnity: the cost of this obligation is charged to the Consolidated Income Statement over the expected service lives of employees. This provision is primarily related to the liability accrued for employees at Tenaris's Italian subsidiary. As from January 1, 2007 as a consequence of a change in an Italian law, employees were entitled to make contributions to external funds, thus, Tenaris's Italian subsidiary pays every year the required contribution to the funds with no further obligation. As a result, the plan changed from a defined benefit plan to a defined contribution plan effective from that date, but only limited to the contributions of 2007 onwards. As of December 31, 2022 the outstanding liability for this plan amounts to \$10.7 million.
- Funded retirement benefit plan held in the U.S. for the benefit of some employees hired prior a certain date, frozen for the purposes of credited service as well as determination of final average pay for the retirement benefit calculation. Plan assets consist primarily of investments in equities and money market funds. Additionally, an unfunded post-retirement health and life plan is present that offers limited medical and life insurance benefits to the retirees, frozen to new participants. As of December 31, 2022 the outstanding liability for these plans amounts to \$7.1 million.

- Funded retirement benefit plans held in Canada for salary and hourly employees hired prior to a certain date based on years of service and, in the case of salaried employees, final average salary. Plan assets consist primarily of investments in debt and equity instruments. Both plans were replaced for defined contribution plans. Effective June 2016 the salary plan was frozen for the purposes of credited service as well as determination of final average pay. As of December 31, 2022 the plan was overfunded and the net assets related to this plan amounted to \$10.4 million.

(3) Other long-term benefits

During 2007, Tenaris launched an employee retention and long-term incentive program (the “Program”) applicable to certain senior officers and employees of the Company, who will be granted a number of units throughout the duration of the Program. The value of each of these units is based on Tenaris’s shareholders’ equity (excluding non-controlling interest). Until the end of 2017, the units were vested ratably over a period of four years and were mandatorily redeemed by the Company ten years after grant date, with the option of an early redemption at seven years after the grant date. Since 2018, the units are vested ratably over the same period and are mandatorily redeemed by the Company seven years after grant date.

The beneficiaries of the Program are entitled to receive cash amounts based on: (i) the amount of dividend payments made by Tenaris to its shareholders and (ii) the number of units held by each beneficiary to the Program. The payment of the benefit is tied to the book value of the shares, and not to their market value. Tenaris valued this long-term incentive program as a long-term benefit plan as classified in IAS 19, “Employee Benefits”.

As of December 31, 2022 and 2021, the outstanding liability corresponding to the Program amounts to \$94.4 million and \$84.2 million, respectively. The total value of the units granted (vested and unvested) to date under the program, considering the number of units and the book value per share as of December 31, 2022 and 2021, is \$123.9 million and \$99.6 million, respectively.

(4) Termination benefits

Termination benefits are payable when employment is terminated by Tenaris before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. Tenaris recognizes termination benefits at the earlier of the following dates: (a) when it can no longer withdraw the offer of those benefits; and (b) when the costs for a restructuring that is within the scope of IAS 37 involves the payment of terminations benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer.

(5) Other compensation obligations

Employee entitlements to annual leave, long-service leave, sick leave and other bonuses and compensations obligations are accrued as earned.

Compensation to employees in the event of dismissal is charged to income in the year in which it becomes payable.

Q Provisions

Tenaris is subject to various claims, lawsuits and other legal proceedings, including customer claims, in which a third party is seeking payment for alleged damages, reimbursement for losses or indemnity. Tenaris’s potential liability with respect to such claims, lawsuits and other legal proceedings cannot be estimated with certainty. Management periodically reviews the status of each significant matter and assesses potential financial exposure. If, as a result of past events, a potential loss from a claim or proceeding is considered probable and the amount can be reliably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements, and take into consideration Tenaris’s litigation and settlement strategies. These estimates are primarily constructed with the assistance of legal counsel. As the scope of liabilities become better defined, there may be changes in the estimates of future costs which could have a material adverse effect on its results of operations, financial condition and cash flows.

If Tenaris expects to be reimbursed for an accrued expense, as would be the case for an expense or loss covered under an insurance contract, and reimbursement is considered virtually certain, the expected reimbursement is recognized as a receivable.

This note should be read in conjunction with note 26 to these Consolidated Financial Statements.

R Trade and other payables

Trade and other payables are recognized initially at fair value, generally the nominal invoice amount and subsequently measured at amortized cost. They are presented as current liabilities unless payment is not due within twelve months after the reporting period. Due to the short-term nature their carrying amounts are considered to be the same as their fair value.

S Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and rendering of services in the ordinary course of Tenaris's activities. The revenue recognized by the Company is measured at the transaction price of the consideration received or receivable to which the Company is entitled to, reduced by estimated returns and other customer credits, such as discounts and volume rebates, based on the expected value to be realized and after eliminating sales within the group.

Revenue is recognized at a point in time or over time from sales when control has been transferred and there is no unfulfilled performance obligation that could affect the acceptance of the product by the customer. The control is transferred upon delivery. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred and either the customer has accepted the product in accordance with the sales contract, the acceptance provisions have lapsed or the Company has objective evidence that all criteria for acceptance have been satisfied, including all performance obligations. These conditions are determined and analyzed on a contract by contract basis to ensure that all performance obligations are fulfilled. In particular, Tenaris verifies customer acceptance of the goods, the satisfaction of delivery terms and any other applicable condition.

For bill and hold transactions revenue is recognized only to the extent that (a) the reason for the bill and hold arrangement must be substantive (for example, the customer has requested the arrangement); (b) the products have been specifically identified and are ready for delivery; (c) the Company does not have the ability to use the product or to direct it to another customer; (d) the usual payment terms apply.

The Company's contracts with customers do not provide any material variable consideration, other than discounts, rebates and right of return. Discounts and rebates are recognized based on the most likely value and rights of return are based on expected value considering past experience and contract conditions.

Where the contracts include multiple performance obligations, the transaction price is allocated to each performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on the expected cost plus margin.

There are no judgements applied by management that significantly affect the determination of timing of satisfaction of performance obligations, nor the transaction price and amounts allocated to different performance obligations.

Tenaris provides services primarily related to goods sold, which represent a non-material portion of sales revenue and mainly include:

Pipe Management Services: This comprises mainly preparation of the pipes ready to be run, delivery to the customer, storage services and rig return.

Field Services: Comprises field technical support and running assistance.

These services are rendered in connection to the sales of goods and are attached to contracts with customers for the sale of goods. A significant portion of service revenue is recognized in the same period as the goods sold. There are no distinct uncertainties in the revenues and cash flows of the goods sold and services rendered as they are included in the same contract, have the same counterparty and are subject to the same conditions.

The Company also provides hydraulic fracturing and coiled tubing services. The revenue related to these services is included in the Other segment.

Revenue from providing services is recognized over time in the accounting period in which the services are rendered. The following inputs and outputs methods are applied to recognize revenue considering the nature of service:

Storage services: the Company provides storage services in owned or third-party warehouses, subject to a variable fee to be invoiced. This fee is determined based on the time that the customer maintains the material in the warehouse and the amount of the material stored. In the majority of cases, to quantify the amount to be invoiced in any given month, the monthly average fee of storage per ton is multiplied by the monthly average stock stored (in tons).

Freights: the Company recognized the revenue on a pro rata basis considering the units delivered and time elapsed.

Field services: the revenue is recognized considering output methods, in particular surveys of service completion provided by the customer.

The Company does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, considering that the contracts do not include any significant financing component, the Company does not adjust any of the transaction prices for the time value of money. For this reason, the Company is also applying the practical expedient not to disclose details on transaction prices allocated to the remaining performance obligations as of the end of the reporting period.

Tenaris only provides standard quality warranties assuring that the goods sold will function as expected or are fit for their intended purpose, with no incremental service to the customer. Accordingly, warranties do not constitute a separate performance obligation.

Other revenues earned by Tenaris are recognized on the following basis:

- Interest income: on the effective yield basis.
- Dividend income from investments in other companies: when Tenaris's right to receive payment is established.
- Construction contracts revenues are recognized in accordance with the stage of the project completion.

T Cost of sales and other selling expenses

Cost of sales and other selling expenses are recognized in the Consolidated Income Statement on the accrual basis of accounting.

Commissions, freights and other selling expenses, including shipping and handling costs, are recorded in *Selling, general and administrative expenses* in the Consolidated Income Statement.

U Earnings per share

Earnings per share are calculated by dividing the income attributable to the shareholders' equity by the daily weighted average number of common shares outstanding during the year.

There are no dilutive potential ordinary shares.

V Financial instruments

Non derivative financial instruments comprise investments in financial debt instruments and equity, time deposits, trade and other receivables, cash and cash equivalents, borrowings and trade and other payables.

The Company classifies its financial instruments according to the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the Company's business model for managing the financial assets and contractual terms of the cash flows.

Financial assets are recognized on their settlement date. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expenses in profit or loss.

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Company classifies its debt instruments:

Amortized Cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest. Interest income from these financial assets is included in finance income using the effective interest rate method.

Exchange gains and losses and impairments related to the financial assets are immediately recognized in the Consolidated Income Statement.

Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest. Interest income from these financial assets is included in finance income using the effective interest rate method. Unrealized gains or losses are recorded as a fair value adjustment in the Consolidated Statement of Comprehensive Income and transferred to the Consolidated Income Statement when the financial asset is sold.

Fair value through profit and loss: Assets that do not meet the criteria for amortized cost or FVOCI. Changes in fair value of financial instruments at FVPL are immediately recognized in the Consolidated Income Statement.

Equity instruments are subsequently measured at fair value.

Accounting for derivative financial instruments and hedging activities is included within the section III, Financial Risk Management.

III. FINANCIAL RISK MANAGEMENT

The multinational nature of Tenaris's operations and customer base exposes the Company to a variety of risks, mainly related to market risks (including the effects of changes in foreign currency exchange rates and interest rates), credit risk and capital market risk. In order to manage the volatility related to these exposures, management evaluates exposures on a consolidated basis, taking advantage of exposure netting. The Company or its subsidiaries may then enter into various derivative transactions in order to prevent potential adverse impacts on Tenaris's financial performance. Such derivative transactions are executed in accordance with internal policies and hedging practices.

A. Financial risk factors

(i) Capital Risk Management

Tenaris seeks to maintain a low debt to total equity ratio considering the industry and the markets where it operates. The year-end ratio of debt to total equity (where "debt" comprises financial borrowings and "total equity" is the sum of financial borrowings and equity) is 0.05 as of December 31, 2022 and 0.03 as of December 31, 2021. The Company does not have to comply with regulatory capital adequacy requirements.

(ii) Foreign exchange risk

Tenaris manufactures and sells its products in a number of countries throughout the world and consequently is exposed to foreign exchange rate risk. Since the Company's functional currency is the U.S. dollar the purpose of Tenaris's foreign currency hedging program is mainly to reduce the risk caused by changes in the exchange rates of other currencies against the U.S. dollar.

Tenaris's exposure to currency fluctuations is reviewed on a periodic and consolidated basis. A number of derivative transactions are performed in order to achieve an efficient coverage in the absence of operative or natural hedges. Almost all of these transactions are forward exchange rates contracts. See note 25 to these Consolidated Financial Statements.

Tenaris does not enter into derivative financial instruments for trading or other speculative purposes, other than non-material investments in structured products.

In the case of subsidiaries with functional currencies other than the U.S. dollar, the results of hedging activities, reported in accordance with IFRS, may not reflect entirely the management's assessment of its foreign exchange risk hedging program. Intercompany balances between Tenaris's subsidiaries may generate financial gains (losses) to the extent that functional currencies differ.

The value of Tenaris's financial assets and liabilities is subject to changes arising from the variation of foreign currency exchange rates. The following table provides a breakdown of Tenaris's main financial assets and liabilities (including foreign exchange derivative contracts) which impact the Company's profit and loss as of December 31, 2022 and 2021.

All amounts Long / (Short) in thousands of U.S. dollars

Currency Exposure / Functional currency	As of December 31,	
	2022	2021
Argentine Peso / U.S. dollar	(126,739)	(95,073)
Euro / U.S. dollar	(42,458)	12,462
Saudi Arabian Riyal / U.S. dollar	(74,183)	(77,853)
U.S. dollar / Brazilian Real	(94,856)	(32,738)

The main relevant exposures correspond to:

- Argentine Peso / U.S. dollar

As of December 31, 2022 and 2021 consisting primarily of Argentine Peso-denominated financial, trade, social and fiscal payables at certain Argentine subsidiaries whose functional currency is the U.S. dollar. A change of 1% in the ARS/USD exchange rate would have generated a pre-tax gain / loss of \$1.3 million and \$1 million as of December 31, 2022 and 2021 respectively.

- Euro / U.S. dollar

As of December 31, 2022 consisting primarily of Euro-denominated intercompany liabilities at certain subsidiaries whose functional currency is the U.S. dollar and 2021, consisting primarily of U.S. dollar-denominated intercompany liabilities at certain subsidiaries whose functional currency is the Euro. A change of 1% in the EUR/USD exchange rate would have generated a pre-tax gain / loss of \$0.4 million and \$0.1 million as of December 31, 2022 and 2021, respectively, which would have been to a large extent offset by changes in currency translation adjustment included in Tenaris's net equity position.

- Saudi Arabian Riyal / U. S. dollar

As of December 31, 2022 and 2021 consisting primarily of Saudi Arabian Riyal-denominated financial and trade payables. The Saudi Arabian Riyal is tied to the U.S. dollar.

- U.S. dollar / Brazilian Real

As of December 31, 2022 and 2021, consisting primarily of U.S. dollar-denominated intercompany liabilities at certain subsidiaries whose functional currency is the Brazilian Real. A change of 1% in the BRL/USD exchange rate would have generated a pre-tax gain / loss of \$0.9 million and \$0.3 million as of December 31, 2022 and 2021, respectively, which would have been to a large extent offset by changes in currency translation adjustment included in Tenaris's net equity position.

Considering the balances held as of December 31, 2022 on financial assets and liabilities exposed to foreign exchange rate fluctuations, Tenaris estimates that the impact of a simultaneous 1% appreciation / depreciation movement in the levels of foreign currencies exchange rates relative to the U.S. dollar, would be a pre-tax gain / loss of \$4 million (including a loss / gain of \$0.2 million due to foreign exchange derivative contracts), which would be partially offset by changes to Tenaris's net equity position of \$0.9 million. For balances held as of December 31, 2021, a simultaneous 1% favorable / unfavorable movement in the foreign currencies exchange rates relative to the U.S. dollar, would have generated a pre-tax gain / loss of \$3.1 million (including a loss / gain of \$0.5 million due to foreign exchange derivative contracts), which would have been partially offset by changes to Tenaris's net equity position of \$0.2 million.

(iii) Interest rate risk

Tenaris is subject to interest rate risk on its investment portfolio and its debt. The Company uses a mix of variable and fixed rate debt in combination with its investment portfolio strategy. The Company may choose to enter into foreign exchange derivative contracts and / or interest rate swaps to mitigate the exposure to changes in the interest rates.

The following table summarizes the proportions of variable-rate and fixed-rate debt as of each year end.

	As of December 31,			
	2022		2021	
	In thousands of U.S. dollars	%	In thousands of U.S. dollars	%
Fixed rate (*)	497,889	68%	187,036	57%
Variable rate	230,873	32%	143,897	43%
Total	728,762		330,933	

(*) Out of the \$497.9 million fixed rate borrowings, \$479 million are short-term.

The Company estimates that, if market interest rates applicable to Tenaris's borrowings had been 100 basis points higher, then the additional pre-tax loss would have been \$5.3 million in 2022 and \$5.2 million in 2021.

(iv) Credit risk

Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. The Company also actively monitors the creditworthiness of its treasury, derivative and insurance counterparties in order to minimize its credit risk.

There is no significant concentration of credit risk from customers. No single customer comprised more than 10% of Tenaris's net sales in 2022, 2021 and 2020.

Tenaris's credit policies related to sales of products and services are designed to identify customers with acceptable credit history and to allow Tenaris to require the use of credit insurance, letters of credit and other instruments designed to minimize credit risks whenever deemed necessary. Tenaris maintains allowances for impairment for potential credit losses. See section II.K.

As of December 31, 2022 and 2021 trade receivables amounted to \$2,493.9 million and \$1,299.1 million respectively. Trade receivables have guarantees under credit insurance of \$231.2 million and \$175.8 million, letter of credit and other bank guarantees of \$34.7 million and \$17.8 million as of December 31, 2022 and 2021 respectively, and other guarantees of \$2.2 million as of December 31, 2021.

As of December 31, 2022 and 2021, overdue trade receivables amounted to \$544.9 million and \$209.6 million, respectively. As of December 31, 2022 and 2021, overdue guaranteed trade receivables amounted to \$28.1 million and \$10.6 million; and the allowance for doubtful accounts amounted to \$45.5 million and \$47.1 million respectively. Both the allowance for doubtful accounts and the existing guarantees are sufficient to cover doubtful trade receivables.

(v) Counterparty risk

Tenaris has investment guidelines with specific parameters to limit issuer risk on marketable securities. Counterparties for derivatives and cash transactions are limited to high credit quality financial institutions, normally investment grade.

Approximately 80% of Tenaris's liquid financial assets corresponded to Investment Grade-rated instruments as of December 31, 2022, in comparison with approximately 77% as of December 31, 2021.

(vi) Liquidity risk

Tenaris financing strategy aims to maintain adequate financial resources and access to additional liquidity. During 2022, Tenaris has counted on cash flows from operations as well as additional bank financing to fund its transactions.

Management maintains sufficient cash and marketable securities to finance normal operations and believes that Tenaris also has appropriate access to market for short-term working capital needs.

Liquid financial assets as a whole (comprising cash and cash equivalents and other investments) were 9% and 7% of total assets at the end of 2022 and 2021, respectively.

Tenaris has a conservative approach to the management of its liquidity, which consists of i) cash and cash equivalents (cash in banks, liquidity funds and investments with a maturity of less than three months at the date of purchase), and ii) other investments (fixed income securities, time deposits, and fund investments).

Tenaris holds primarily investments in money market funds and variable or fixed-rate securities from investment grade issuers. As of December 31, 2022 and 2021 Tenaris held \$5 million and \$6 million in direct exposure to financial instruments issued by European sovereign counterparties respectively.

Tenaris holds its investments primarily in U.S. dollars. As of December 31, 2022 and 2021, U.S. dollar denominated liquid assets plus investments denominated in other currencies hedged to the U.S. dollar represented approximately 87% of total liquid financial assets.

(vii) Commodity price risk

In the ordinary course of its operations, Tenaris purchases commodities and raw materials that are subject to price volatility caused by supply conditions, political and economic variables and other factors. As a consequence, Tenaris is exposed to risk resulting from fluctuations in the prices of these commodities and raw materials. Tenaris fixes the prices of such raw materials and commodities for short-term periods, typically not in excess of one year, and in general hedging for these risks is performed on a limited basis.

B. Category of financial instruments and classification within the fair value hierarchy

As mentioned in note II.A, the Company classifies its financial instruments in the following measurement categories: amortized cost, fair value through other comprehensive income and fair value through profit and loss. For financial instruments that are measured in the statement of financial position at fair value, IFRS 13, "Fair value measurement" requires a disclosure of fair value measurements by level according to the following fair value measurement hierarchy:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

Level 3 - Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The following tables present the financial instruments by category and levels as of December 31, 2022 and 2021.

December 31, 2022	Carrying amount	Measurement Categories			At Fair Value		
		Amortized Cost	FVOCI	FVPL	Level 1	Level 2	Level 3
Assets							
<i>Cash and cash equivalents</i>	1,091,527	668,668	-	422,859	422,859	-	-
<i>Other investments</i>	438,448	196,152	182,988	59,308	242,296	-	-
<i>Fixed income (time-deposit, zero coupon bonds, commercial papers)</i>	196,152	196,152	-	-	-	-	-
Certificates of deposits	36,167	36,167	-	-	-	-	-
Commercial papers	19,785	19,785	-	-	-	-	-
Other notes	140,200	140,200	-	-	-	-	-
<i>Bonds and other fixed income</i>	211,953	-	182,988	28,965	211,953	-	-
Non-U.S. government securities	108,310	-	79,345	28,965	108,310	-	-
Corporates securities	103,643	-	103,643	-	103,643	-	-
Mutual Fund	30,343	-	-	30,343	30,343	-	-
<i>Derivative financial instruments</i>	30,805	-	-	30,805	-	30,805	-
<i>Other Investments Non-current</i>	119,902	-	113,574	6,328	113,574	-	6,328
Bonds and other fixed income	113,574	-	113,574	-	113,574	-	-
Other investments	6,328	-	-	6,328	-	-	6,328
<i>Trade receivables</i>	2,493,940	2,493,940	-	-	-	-	-
<i>Receivables C and NC (*)</i>	395,531	105,397	48,659	-	-	-	48,659
Other receivables	154,056	105,397	48,659	-	-	-	48,659
Other receivables (non-financial)	241,475	-	-	-	-	-	-
Total		3,464,157	345,221	519,300	778,729	30,805	54,987
Liabilities							
<i>Borrowings C and NC</i>	728,762	728,762	-	-	-	-	-
<i>Trade payables</i>	1,179,457	1,179,457	-	-	-	-	-
<i>Lease Liabilities C and NC</i>	112,177	112,177	-	-	-	-	-
<i>Derivative financial instruments</i>	7,127	-	-	7,127	-	7,127	-
Total		2,020,396	-	7,127	-	7,127	-

(*) Includes balances related to interest in Venezuelan companies. See note 34 to these Consolidated Financial Statements.

December 31, 2021	Carrying amount	Measurement Categories			At Fair Value		
		Amortized Cost	FVOCI	FVPL	Level 1	Level 2	Level 3
Assets							
<i>Cash and cash equivalents</i>	318,127	212,430	-	105,697	105,697	-	-
<i>Other investments</i>	397,849	239,742	158,107	-	158,107	-	-
<i>Fixed income (time-deposit, zero coupon bonds, commercial papers)</i>	239,742	239,742	-	-	-	-	-
Certificates of deposits	94,414	94,414	-	-	-	-	-
Commercial papers	30,062	30,062	-	-	-	-	-
Other notes	115,266	115,266	-	-	-	-	-
<i>Bonds and other fixed income</i>	158,107	-	158,107	-	158,107	-	-
Non-U.S. government securities	10,660	-	10,660	-	10,660	-	-
Corporates securities	147,447	-	147,447	-	147,447	-	-
<i>Derivative financial instruments</i>	11,315	-	-	11,315	-	11,315	-
<i>Other Investments Non-current</i>	320,254	-	312,619	7,635	312,619	-	7,635
Bonds and other fixed income	312,619	-	312,619	-	312,619	-	-
Other investments	7,635	-	-	7,635	-	-	7,635
<i>Trade receivables</i>	1,299,072	1,299,072	-	-	-	-	-
<i>Receivables C and NC (*)</i>	302,164	85,220	48,659	-	-	-	48,659
Other receivables	133,879	85,220	48,659	-	-	-	48,659
Other receivables (non-financial)	168,285	-	-	-	-	-	-
Total		1,836,464	519,385	124,647	576,423	11,315	56,294
Liabilities							
<i>Borrowings C and NC</i>	330,933	330,933	-	-	-	-	-
<i>Trade payables</i>	845,256	845,256	-	-	-	-	-
<i>Lease Liabilities C and NC</i>	117,285	117,285	-	-	-	-	-
<i>Derivative financial instruments</i>	11,328	-	-	11,328	-	11,328	-
Total		1,293,474	-	11,328	-	11,328	-

(*) Includes balances related to interest in Venezuelan companies. See note 34 to these Consolidated Financial Statements.

There were no transfers between levels during the year.

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by Tenaris is the current bid price. These instruments are included in Level 1 and comprise primarily corporate and sovereign debt securities.

The fair value of financial instruments that are not traded in an active market (such as certain debt securities, certificates of deposits with original maturity of more than three months, forward and interest rate derivative instruments) is determined by using valuation techniques which maximize the use of observable market data when available and rely as little as possible on entity specific estimates. If all significant inputs required to value an instrument are observable, the instrument is included in Level 2. Tenaris values its assets and liabilities included in this level using bid prices, interest rate curves, broker quotations, current exchange rates, forward rates and implied volatilities obtained from market contributors as of the valuation date.

If one or more of the significant inputs are not based on observable market data, the instruments are included in Level 3. Tenaris values its assets and liabilities in this level using observable market inputs and management assumptions which reflect the Company's best estimate on how market participants would price the asset or liability at measurement date. Main balances in this level include net receivables related to the Company interest in the Venezuelan Companies for a total amount of approximately \$48.7 million, which reflects the best estimation of the fair value calculated using the probability of occurrence of weighted scenarios applied to the potential transaction value resulting from the awards purchase agreement mentioned in note 34 to these Consolidated Financial Statements.

The following table presents the changes in Level 3 assets:

	Year ended December 31,	
	2022	2021
At the beginning of the year	56,294	56,319
(Decrease) / increase	(1,126)	219
Currency translation adjustment and others	(181)	(244)
At the end of the year	54,987	56,294

C. Fair value estimation

Financial assets or liabilities classified at fair value through profit or loss are measured under the framework established by the IASB accounting guidance for fair value measurements and disclosures.

The fair values of quoted investments are generally based on current bid prices. If the market for a financial asset is not active or no market is available, fair values are established using standard valuation techniques.

The fair value of all outstanding derivatives is determined using specific pricing models that include inputs that are observable in the market or can be derived from or corroborated by observable data. The fair value of forward foreign exchange contracts is calculated as the net present value of the estimated future cash flows in each currency, based on observable yield curves, converted into U.S. dollars at the spot rate of the valuation date.

Borrowings are classified under other financial liabilities and measured at their amortized cost. Tenaris estimates that the fair value of its main financial liabilities is approximately 99.2% and 99.6% of its carrying amount (including interests accrued) in 2022 and 2021 respectively. Fair values were calculated using standard valuation techniques for floating rate instruments and comparable market rates for discounting cash flows.

The carrying amount of investments valued at amortized cost approximates its fair value.

D. Accounting for derivative financial instruments and hedging activities

Derivative financial instruments are initially recognized in the statement of financial position at fair value through profit and loss on each date a derivative contract is entered into and are subsequently remeasured at fair value. Specific tools are used for calculation of each instrument's fair value and these tools are tested for consistency on a monthly basis. Market rates are used for all pricing operations. These include exchange rates, deposit rates and other discount rates matching the nature of each underlying risk.

As a general rule, Tenaris recognizes the full amount related to the change in fair value of derivative financial instruments in *Financial Results* in the Consolidated Income Statement.

Tenaris designates certain derivatives as hedges of particular risks associated with recognized assets or liabilities or highly probable forecast transactions. These transactions are classified as cash flow hedges. The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in equity. Amounts accumulated in equity are then recognized in the income statement in the same period as the offsetting losses and gains on the hedged item. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of Tenaris's derivative financial instruments (assets or liabilities) continues to be reflected in the statement of financial position.

For transactions designated and qualifying for hedge accounting, Tenaris documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. Tenaris also documents its assessment on an ongoing basis, of whether the hedging instruments are highly effective in offsetting changes in the fair value or cash flow of hedged items. At December 31, 2022 and 2021, the effective portion of designated cash flow hedges which is included in *Other Reserves* in equity amounted to \$13.1 million credit and \$1.3 million credit respectively.

The fair values of various derivative instruments used for hedging purposes and the movements of the hedging reserve included within *Other Reserves* in equity are disclosed in note 25 to these Consolidated Financial Statements.

IV. OTHER NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 Segment information

As mentioned in section II.C, the Segment Information is disclosed as follows:

Reportable operating segments

(All amounts in millions of U.S. dollars)

Year ended December 31, 2022	Tubes	Other	Total
Management view - operating income	2,772	75	2,847
Difference in cost of sales			44
Differences in depreciation and amortization			2
Differences in selling, general and administrative expenses			(4)
Differences in other operating income (expenses), net			74
IFRS - operating income			2,963
Financial income (expense), net			(6)
Income before equity in earnings of non-consolidated companies and income tax			2,957
Equity in earnings of non-consolidated companies			209
Income before income tax			3,166
IFRS - Net Sales	11,133	630	11,763
<i>Depreciation and amortization</i>	<i>588</i>	<i>20</i>	<i>608</i>
Year ended December 31, 2021	Tubes	Other	Total
Management view - operating income	178	65	243
Difference in cost of sales			473
Differences in depreciation and amortization			(1)
Differences in other operating income (expenses), net			(8)
IFRS - operating income			708
Financial income (expense), net			23
Income before equity in earnings of non-consolidated companies and income tax			731
Equity in earnings of non-consolidated companies			513
Income before income tax			1,243
IFRS - Net Sales	5,994	528	6,521
<i>Depreciation and amortization</i>	<i>575</i>	<i>20</i>	<i>595</i>
Year ended December 31, 2020	Tubes	Other	Total
Management view - operating (loss)	(277)	(50)	(327)
Difference in cost of sales			(134)
Differences in depreciation and amortization			-
Differences in selling, general and administrative expenses			(2)
Differences in other operating income (expenses), net			(200)
IFRS - operating (loss)			(663)
Financial income (expense), net			(65)
(Loss) before equity in earnings of non-consolidated companies and income tax			(728)
Equity in earnings of non-consolidated companies			109
(Loss) before income tax			(619)
IFRS - Net Sales	4,844	303	5,147
<i>Depreciation and amortization</i>	<i>661</i>	<i>18</i>	<i>679</i>

Transactions between segments, which were eliminated in consolidation, are mainly related to sales of scrap, energy, surplus raw materials and others from the Other segment to the Tubes segment for \$77.9 million, \$45.6 million and \$16.9 million in 2022, 2021 and 2020, respectively.

There are no material differences between IFRS and management view in total revenues and by reportable segments.

The differences between operating income under IFRS view and the management view are mainly related to the cost of goods sold, reflecting the effect of raw materials prices increases on the valuation of the replacement cost considered for management view compared to IFRS cost calculated at historical cost on a FIFO basis, and other minor timing differences.

The main difference in *Other operating income (expenses)*, for the year ended December 31, 2022, is attributable to the effect of the reclassification of the currency translation adjustment reserve related to NKK Tubes' definitive cease of operations, not impacting the management view. For the year ended in December 31, 2020, the main difference in *Other operating income (expenses)* is attributable to the impairment of the goodwill, which residual value in the management view differed from IFRS.

In addition to the amounts reconciled above, the main differences in net income arise from the impact of functional currencies on financial result, deferred income taxes as well as the result of investment in non-consolidated companies.

Geographical information

	North America	South America	Europe	Middle East & Africa	Asia Pacific	Unallocated ^(*)	Total
Year ended December 31, 2022							
Net sales	6,902,787	2,550,402	1,000,833	1,031,106	277,398	-	11,762,526
Total assets	9,018,386	3,896,403	2,071,624	739,579	283,608	1,540,646	17,550,246
Trade receivables	1,371,717	583,223	202,753	249,637	86,610	-	2,493,940
Property, plant and equipment, net	3,548,844	1,031,423	706,539	189,701	79,756	-	5,556,263
Capital expenditures	118,644	176,448	62,143	2,813	18,398	-	378,446
Depreciation and amortization	348,550	125,324	76,631	37,612	19,606	-	607,723
Year ended December 31, 2021							
Net sales	3,360,345	1,311,279	742,463	857,120	250,000	-	6,521,207
Total assets	7,992,946	2,399,448	1,727,573	581,204	364,486	1,383,774	14,449,431
Trade receivables	652,483	234,800	180,515	146,125	85,149	-	1,299,072
Property, plant and equipment, net	3,805,912	984,413	742,461	221,859	70,156	-	5,824,801
Capital expenditures	106,118	63,723	43,344	6,689	19,644	-	239,518
Depreciation and amortization	307,116	125,781	89,667	41,528	30,629	-	594,721
Year ended December 31, 2020							
Net sales	2,179,949	776,235	642,793	1,227,532	320,225	-	5,146,734
Total assets	8,071,574	1,868,458	1,461,738	804,559	552,508	957,352	13,716,189
Trade receivables	411,692	115,972	139,427	210,194	90,863	-	968,148
Property, plant and equipment, net	3,971,101	1,050,619	823,057	242,939	105,465	-	6,193,181
Capital expenditures	71,531	63,111	39,691	10,452	8,537	-	193,322
Depreciation and amortization	408,546	106,827	84,518	44,259	34,656	-	678,806

(*) For 2022, 2021 and 2020 includes *Investments in non-consolidated companies*. See note 13 to these Consolidated Financial Statements.

There are no revenues from external customers attributable to the Company's country of incorporation (Luxembourg).

The principal countries from which the Company derives its revenues are USA (42%), Argentina (13%), Mexico (10%), Canada, Colombia and Italy.

Revenue is mainly recognized at a point in time to direct customers, when control has been transferred and there is no unfulfilled performance obligation that could affect the acceptance of the product by the customer. Revenues related to governmental institutions represent approximately 22%, 23% and 24% in 2022, 2021 and 2020 respectively.

Tubes segment revenues by market:

(All amounts in millions of U.S. dollars)

Revenues Tubes	2022	2021	2020
Oil & Gas	9,543	4,895	4,022
Oil & Gas processing plants	738	459	407
Industrial, Power and Others	852	640	415
Total	11,133	5,994	4,844

At December 31, 2022, 2021 and 2020, the Company recognized contract liabilities related to customer advances in the amount of \$242.9 million, \$92.4 million and \$48.7 million, respectively. Each of these amounts are reclassified to revenues during the subsequent years. In these periods, no significant adjustments in revenues were performed related to previously satisfied performance obligations.

2 Cost of sales

	Year ended December 31,		
	2022	2021	2020
Inventories at the beginning of the year	2,672,593	1,636,673	2,265,880
Increase in inventory due to business combinations	-	-	199,589
Decrease in inventory due to sale of subsidiaries	-	(10,662)	-
Plus: Charges of the year			
Raw materials, energy, consumables and other	5,772,031	3,841,551	1,545,688
Services and fees	293,490	208,472	154,976
Labor cost (*)	1,160,085	824,071	757,359
Depreciation of property, plant and equipment	465,849	448,843	503,725
Amortization of intangible assets	11,754	7,645	8,121
Depreciation of right-of-use assets	33,244	35,910	40,127
Maintenance expenses	267,294	129,350	107,764
Allowance for obsolescence	24,901	23,296	35,809
Taxes	194,736	40,887	45,162
Other	178,691	98,159	59,790
	8,402,075	5,647,522	3,458,110
Less: Inventories at the end of the year	(3,986,929)	(2,672,593)	(1,636,673)
	7,087,739	4,611,602	4,087,317

(*) For the year ended December 2022, 2021 and 2020, labor cost includes approximately \$17.8 million, \$12.8 million and \$81.3 million respectively of severance indemnities related to the adjustment of the workforce to market conditions.

3 Selling, general and administrative expenses

	Year ended December 31,		
	2022	2021	2020
Services and fees	148,331	115,303	115,883
Labor cost (*)	518,500	426,414	444,436
Depreciation of property, plant and equipment	21,883	22,924	26,814
Amortization of intangible assets	59,018	63,874	82,355
Depreciation of right-of-use assets	15,975	15,525	17,664
Commissions, freight and other selling expenses	641,812	415,895	310,815
Provisions for contingencies	20,606	24,998	11,957
Allowances for doubtful accounts	(223)	(4,297)	4,644
Taxes	121,410	78,800	63,234
Other	87,263	47,133	41,425
	1,634,575	1,206,569	1,119,227

(*) For the year ended December 2022, 2021 and 2020, labor cost includes approximately \$11.2 million, \$15.8 million and \$61.2 million respectively of severance indemnities related to the adjustment of the workforce to market conditions.

4 Labor costs (included in Cost of sales and in Selling, general and administrative expenses)

	Year ended December 31,		
	2022	2021	2020
Wages, salaries and social security costs	1,594,200	1,170,562	1,036,211
Severance indemnities	29,070	28,625	142,458
Defined contribution plans	13,256	12,608	12,442
Pension benefits - defined benefit plans	16,320	13,353	11,097
Employee retention and long-term incentive program	25,739	25,337	(413)
	1,678,585	1,250,485	1,201,795

The following table shows the geographical distribution of the employees:

	2022	2021	2020
Argentina	6,444	5,169	4,376
Mexico	5,919	5,474	4,501
USA	3,509	2,684	1,596
Italy	2,136	2,011	2,039
Romania	1,847	1,725	1,552
Brazil	1,460	1,817	1,360
Colombia	1,183	1,009	746
Canada	944	758	561
Indonesia	495	506	521
Japan	11	379	399
Other	1,344	1,244	1,377
	25,292	22,776	19,028

5 Impairment charge

Tenaris's main source of revenue is the sale of products and services to the oil and gas industry, and the level of such sales is sensitive to international oil and gas prices and their impact on drilling activities.

The Company conducts regular assessments of the carrying values of its assets. The recoverable value is based on the value in use. The main key assumptions used in estimating the value in use are discount rate, growth rate and competitive, economic and regulatory factors applied to determine cash flow projections, such as oil and gas prices, average number of active oil and gas drilling rigs (rig count) and raw material costs. In December 2022, the Company conducted impairment tests, and also reviewed and impaired the values of certain idle assets in its subsidiaries.

For purposes of assessing key assumptions, to estimate discounted future cash flows, the Company uses external sources of information and management judgment based on past experience and expectations. Management has determined the value of each of the key assumptions as follows:

- Discount rate: based on the applicable weighted average cost of capital ("WACC"), which is considered to be a good indicator of capital cost, taking into account the industry, country and size of the business. For each CGU where assets are allocated, a specific WACC was determined. In 2022, the main discount rates used were in a range between 13.4% and 20.2%.
- Growth rate: considers mainly the inflation impact on prices and costs, the long-term evolution of the oil and gas industry, the higher demand to offset depletion- of existing fields and the Company's expected market penetration. In 2022, a nominal growth rate of 2% was considered.
- Oil and gas prices: based on industry analysts' reports and management's expectations of market development.
- Rig count: based on information published by Baker Hughes and management's expectations.
- Raw material costs: based on industry analysts' reports and management's expectations.

In December 2022, in the presence of impairment indicators, the Company conducted impairment tests and reviewed the values of certain idle assets in its subsidiaries. The aforementioned analysis resulted in impairment charges of \$76.7 million, allocated in \$63.1 million to the Tubes segment and \$13.6 million to the Other segment.

In December, 2021, as a result of the expected termination of the NKK Tubes joint venture, which represented an impairment indicator for its assets, an impairment test was conducted, resulting in a charge of \$57 million that totally reduced the carrying amounts of property, plant and equipment and intangible assets. The total amount was allocated to the Tubes segment. Remaining carrying amounts after the recognition of impairment charges amounted to \$53 million mainly related to working capital.

For the year 2020 a charge of approximately \$622 million, impacting the carrying value of goodwill of the CGUs OCTG-USA, IPSCO and Coiled Tubing for \$225 million, \$357 million and \$4 million respectively, and the carrying value of property, plant and equipment of the CGU Rods-USA for \$36 million was recorded. Out of the total amount, \$582 million were allocated to the Tubes segment.

6 Other operating income and expenses

	Year ended December 31,		
	2022	2021	2020
<i>Other operating income</i>			
Net income from other sales	28,161	10,694	9,891
Net rents	5,084	5,314	5,501
Reclassification of currency translation adjustment reserve (*)	71,252	-	-
Tax recovery in Brazilian subsidiaries (**)	-	35,568	8,164
Other (***)	-	16,290	9,837
Recovery on allowance for doubtful receivables	-	379	-
	104,497	68,245	33,393
<i>Other operating expenses</i>			
Contributions to welfare projects and non-profit organizations	13,668	6,697	12,989
Securities Exchange Commission investigation settlement (****)	78,100	-	-
Allowance for doubtful receivables	346	-	1,263
Other	12,595	-	-
	104,709	6,697	14,252

(*) During 2022, as result of NKK Tubes' definitive cease of operations, the currency translation adjustment reserve belonging to the shareholders was reclassified to the income statement. For more information see note 35 "Other Relevant Information – Agreement to terminate NKK Tubes joint venture".

(**) On May 13, 2021, the Brazilian Supreme Court issued a final judgment which confirmed that the methodology for calculating PIS and COFINS (Federal Social Contributions on Gross Revenues) tax claims to which taxpayers are entitled to, should exclude from its base the total output of ICMS, calculated on a gross basis. This decision led to a recognition of approximately \$53 million tax credit in Brazilian subsidiaries, out of which \$36 million were recognized in other operating income and \$17 million in financial results (impacting in Finance Income and Finance Cost). In addition the tax charge related to this gain amounted to \$12 million.

(***) On November 1, 2021 the Company transferred 100% of the shares of Geneva Structural Tubes LLC ("Geneva") to MKK USA Inc., a subsidiary of Maruichi Steel Tube Ltd of Japan for an aggregate price of \$24.3 million. The gain of this transaction ascended to approximately \$6.8 million.

(****) For more information see note 26 "Contingencies, commitments and restrictions to the distribution of profits - Contingencies - Petrobras-related proceedings and claims".

7 Financial results

	Year ended December 31,		
	2022	2021	2020
Interest Income	86,112	38,048	21,625
Net result on changes in FV of financial assets at FVPL	(6,092)	-	-
Impairment result on financial assets at FVTOCI	-	-	(3,238)
Finance Income (*)	80,020	38,048	18,387
Finance cost	(45,940)	(23,677)	(27,014)
Net foreign exchange transactions results (**)	15,654	17,287	(74,422)
Foreign exchange derivatives contracts results (***)	(25,666)	(7,966)	19,644
Other (****)	(30,108)	(1,026)	(1,590)
Other financial results	(40,120)	8,295	(56,368)
Net financial results	(6,040)	22,666	(64,995)

() Finance Income:*

In 2022, 2021 and 2020 includes \$33 million, \$3.3 million and \$6.5 million of interest related to instruments carried at FVPL, respectively.

In 2022 also includes a realized loss of \$10.5 million related to the change in FV of certain financial instruments obtained in an operation of settlement of trade receivables.

In 2021 also includes \$18 million of non-financial interest related to PIS and COFINS taxes recovery in Brazilian subsidiaries. For more information, see note 6 to these Consolidated Financial Statements.

*(**) Net foreign exchange transactions results:*

In 2022 mainly includes result from the Argentine peso and Japanese yen depreciation against the U.S. dollar on Argentine peso and Japanese yen denominated trade, financial, social, and fiscal payables at subsidiaries with functional currency U.S. dollar, together with the result from Euro depreciation against the U.S. dollar on Euro denominated intercompany liabilities in subsidiaries with functional currency U.S. dollar, largely offset by an increase in currency translation adjustment reserve from an Italian subsidiary.

In 2021 mainly includes the result from Euro depreciation against the U.S. dollar on Euro denominated intercompany liabilities in subsidiaries with functional currency U.S. dollar, largely offset by an increase in currency translation adjustment reserve from an Italian subsidiary, together with the result from the Argentine peso and Japanese yen depreciation against the U.S. dollar on Argentine peso and Japanese yen denominated trade, financial, social, and fiscal payables at subsidiaries with functional currency U.S. dollar.

In 2020 mainly includes the negative impact from Euro appreciation against the U.S. dollar on Euro denominated intercompany liabilities in subsidiaries with functional currency U.S. dollar, largely offset by the currency translation adjustment reserve from our Italian subsidiary, together with the negative impact from Brazilian Real depreciation against the U.S. dollar on U.S. dollar denominated intercompany liabilities in subsidiaries with functional currency Brazilian Real, largely offset by the currency translation adjustment reserve from our Brazilian subsidiaries. Also includes the negative result from the Mexican peso depreciation against the U.S. dollar on peso denominated trade, social, fiscal and financial positions at Mexican subsidiaries with functional currency U.S. dollar.

*(***) Foreign exchange derivatives contracts results:*

In 2022 includes mainly losses on derivatives covering net receivables in Brazilian real and net liabilities in Euro and Japanese yen.

In 2021 includes mainly losses on derivatives covering net liabilities in Euro and Japanese yen, partially offset by gains on derivatives covering net receivables in Brazilian real.

In 2020 includes mainly gain on derivatives covering net receivables in Mexican peso, Brazilian real and Canadian dollar and net payables in Euro.

*(****) Other:*

In 2022 includes a loss of \$29.8 million related to the transfer of Argentine sovereign bonds paid as dividend in kind from an Argentinian subsidiary to its shareholders. For more information see note 28.

8 Income tax

	Year ended December 31,		
	2022	2021	2020
Current tax	(589,706)	(215,467)	(121,048)
Deferred tax	(27,530)	26,019	97,898
Tax charge	(617,236)	(189,448)	(23,150)

The tax on Tenaris's income before tax differs from the theoretical amount that would arise using the tax rate in each country as follows:

	Year ended December 31,		
	2022	2021	2020
Income (loss) before income tax	3,165,937	1,242,766	(619,267)
Less impairment charges (non-deductible)	-	57,075	622,402
Income before income tax without impairment charges	3,165,937	1,299,841	3,135
Tax calculated at the tax rate in each country	(705,727)	(209,765)	21,052
Effect of currency translation on tax base	(187,186)	(76,043)	(72,936)
Changes in the tax rates	(3,422)	(29,881)	(958)
Utilization of previously unrecognized tax losses	29,560	966	98
Tax revaluation, withholding tax and others	249,539	125,275	29,594
Tax charges	(617,236)	(189,448)	(23,150)

Effect of currency translation on tax base. Tenaris applies the liability method to recognize deferred income tax on temporary differences between the tax bases of assets / liabilities and their carrying amounts in the financial statements. By application of this method, Tenaris recognizes gains and losses on deferred income tax due to the effect of the change in the value on the tax bases in subsidiaries (mainly Argentina and Mexico), which have a functional currency different than their local currency. These gains and losses are required by IFRS even though the revalued / devalued tax bases of the relevant assets will not result in any deduction / obligation for tax purposes in future periods.

Changes in the tax rates includes mainly the effect of the increase in the corporate income tax rate in Argentina from 25% to 35% for fiscal years starting January 1, 2021.

Tax revaluation, withholding tax and others, includes a net tax income of \$250 million, \$113 million and \$61 million for 2022, 2021 and 2020 respectively related to the tax revaluation regimes in Argentina and Mexico. It also includes a charge of \$21 million, \$23 million and \$10 million for 2022, 2021 and 2020 respectively related to withholding taxes for intra-group international operations.

9 Dividends distribution

On November 3, 2022, the Company's Board of Directors approved the payment of an interim dividend of \$0.17 per share (\$0.34 per ADS), or approximately \$201 million, paid on November 23, 2022, with an ex-dividend date of November 21, 2022.

On May 3, 2022, the Company's Shareholders approved an annual dividend in the amount of \$0.41 per share (\$0.82 per ADS). The amount approved included the interim dividend previously paid in November 24, 2021 in the amount of \$0.13 per share (\$0.26 per ADS). The balance, amounting to \$0.28 per share (\$0.56 per ADS), was paid on May 25, 2022, for an amount of approximately \$331 million. In the aggregate, the interim dividend paid in November 2021 and the balance paid in May 2022 amounted to approximately \$484 million.

On May 3, 2021, the Company's Shareholders approved an annual dividend in the amount of \$0.21 per share (\$0.42 per ADS). The amount approved included the interim dividend previously paid in November 25, 2020 in the amount of \$0.07 per share (\$0.14 per ADS). The balance, amounting to \$0.14 per share (\$0.28 per ADS), was paid on May 26, 2021, for an amount of approximately \$165 million. In the aggregate, the interim dividend paid in November 2020 and the balance paid in May 2021 amounted to approximately \$248 million.

10 Property, plant and equipment, net

Year ended December 31, 2022	Land and civil buildings	Industrial buildings, plant and production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts and equipment	Total
Cost						
Values at the beginning of the year	830,104	13,064,541	420,930	147,429	59,522	14,522,526
Currency translation adjustment	(1,601)	(71,347)	(1,838)	376	(174)	(74,584)
Increase due to business combinations (*)	-	-	-	187	-	187
Additions	-	2,271	734	334,912	8,150	346,067
Transfers / Reclassifications	9,829	184,915	16,221	(227,153)	-	(16,188)
Disposals / Consumptions	(22,569)	(322,886)	(33,562)	(3,372)	(11,972)	(394,361)
Values at the end of the year	815,763	12,857,494	402,485	252,379	55,526	14,383,647
Depreciation and impairment						
Accumulated at the beginning of the year	139,941	8,199,724	353,639	-	4,421	8,697,725
Currency translation adjustment	(289)	(51,283)	(1,756)	-	130	(53,198)
Depreciation charge	13,577	432,648	21,022	-	20,485	487,732
Impairment charge (See note 5)	-	75,722	321	-	-	76,043
Transfers / Reclassifications	(2)	(21,506)	(215)	-	-	(21,723)
Disposals / Consumptions	(955)	(321,334)	(32,485)	-	(4,421)	(359,195)
Accumulated at the end of the year	152,272	8,313,971	340,526	-	20,615	8,827,384
At December 31, 2022	663,491	4,543,523	61,959	252,379	34,911	5,556,263

(*) Related to Parques Eólicos de la Buena Ventura S.A. acquisition, for more information see note 33 to these Consolidated Financial Statements.

Year ended December 31, 2021	Land and civil buildings	Industrial buildings, plant and production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts and equipment	Total
Cost						
Values at the beginning of the year	839,584	13,079,545	414,757	102,226	61,893	14,498,005
Currency translation adjustment	(5,084)	(138,839)	(5,042)	(365)	(569)	(149,899)
Additions	8	15,238	1,171	192,470	4,830	213,717
Transfers / Reclassifications	2,448	148,037	17,688	(146,752)	-	21,421
Decrease due to sale of subsidiaries (*)	(200)	(4,310)	(62)	-	-	(4,572)
Disposals / Consumptions	(6,652)	(35,130)	(7,582)	(150)	(6,632)	(56,146)
Values at the end of the year	830,104	13,064,541	420,930	147,429	59,522	14,522,526
Depreciation and impairment						
Accumulated at the beginning of the year	132,458	7,830,120	342,246	-	-	8,304,824
Currency translation adjustment	(1,292)	(97,236)	(4,621)	-	-	(103,149)
Depreciation charge	9,736	440,316	21,715	-	-	471,767
Impairment charge (See note 5)	-	51,470	780	-	4,421	56,671
Decrease due to sale of subsidiaries (*)	-	(567)	(53)	-	-	(620)
Disposals / Consumptions	(961)	(24,379)	(6,428)	-	-	(31,768)
Accumulated at the end of the year	139,941	8,199,724	353,639	-	4,421	8,697,725
At December 31, 2021	690,163	4,864,817	67,291	147,429	55,101	5,824,801

(*) Related to Geneva sale. See note 6 to these Consolidated Financial Statements.

See note 27 for a description of certain restricted assets with a carrying value of \$56.2 million held in Saudi Arabia by the Company's subsidiary SSPC, in which Tenaris holds a 47.79%.

Property, plant and equipment include capitalized interests for net amounts at December 31, 2022 and 2021 of \$30.4 million and \$32 million, respectively. There were no new interests capitalized during 2022 and 2021.

Government grants recognized as a reduction of property, plant and equipment were immaterial for the years 2022 and 2021.

The carrying amounts of assets pledged as security for current and non-current borrowings were immaterial for the years 2022 and 2021.

11 Intangible assets, net

Year ended December 31, 2022	Information system projects	Licenses, patents and trademarks (*)	Goodwill	Customer relationships	Total
Cost					
Values at the beginning of the year	650,155	547,527	2,468,638	2,211,151	5,877,471
Currency translation adjustment	(2,626)	-	1,088	-	(1,538)
Increase due to business combinations (**)	-	4,019	-	-	4,019
Additions	31,427	952	-	-	32,379
Transfers / Reclassifications	(5,535)	-	-	-	(5,535)
Disposals (***)	(58,947)	(1,507)	-	(449,109)	(509,563)
Values at the end of the year	614,474	550,991	2,469,726	1,762,042	5,397,233
Amortization and impairment					
Accumulated at the beginning of the year	599,307	391,223	1,383,994	2,130,771	4,505,295
Currency translation adjustment	(2,496)	-	-	-	(2,496)
Amortization charge	23,218	8,701	-	38,853	70,772
Impairment charge (See note 5)	2	-	680	-	682
Disposals (***)	(58,912)	(1,507)	-	(449,109)	(509,528)
Accumulated at the end of the year	561,119	398,417	1,384,674	1,720,515	4,064,725
At December 31, 2022	53,355	152,574	1,085,052	41,527	1,332,508

(*) Includes Proprietary Technology.

(**) Related to Parques Eólicos de la Buena Ventura S.A. acquisition, for more information see note 33 to these Consolidated Financial Statements.

(***) Mainly related to fully depreciated assets following the deconsolidation of a Canadian subsidiary of the Company.

Year ended December 31, 2021	Information system projects	Licenses, patents and trademarks (*)	Goodwill	Customer relationships	Total
Cost					
Values at the beginning of the year	637,352	550,500	2,469,962	2,211,151	5,868,965
Currency translation adjustment	(6,466)	(151)	(1,324)	-	(7,941)
Additions	22,830	2,971	-	-	25,801
Transfers / Reclassifications	(2,902)	(4,637)	-	-	(7,539)
Disposals	(659)	(1,156)	-	-	(1,815)
Values at the end of the year	650,155	547,527	2,468,638	2,211,151	5,877,471
Amortization and impairment					
Accumulated at the beginning of the year	577,359	382,531	1,383,994	2,096,025	4,439,909
Currency translation adjustment	(6,014)	-	-	-	(6,014)
Amortization charge	28,072	8,701	-	34,746	71,519
Impairment charge (See note 5)	404	-	-	-	404
Disposals	(514)	(9)	-	-	(523)
Accumulated at the end of the year	599,307	391,223	1,383,994	2,130,771	4,505,295
At December 31, 2021	50,848	156,304	1,084,644	80,380	1,372,176

(*) Includes Proprietary Technology.

The geographical allocation of goodwill for the year ended December 31, 2022 was \$939.2 million for North America, \$111 million for South America, \$33 million for Middle East & Africa and \$1.9 million for Europe.

The carrying amount of goodwill allocated by CGU, as of December 31, 2022, was as follows:

(all amounts in millions of U.S. dollars)

CGU	Tubes Segment		Total
	Hydril Acquisition	Other	
Tamsa (Hydril and other)	346	19	365
Siderca (Hydril and other)	265	93	358
Hydril	309	-	309
Other	-	53	53
Total	920	165	1,085

12 Right-of-use assets, net and lease liabilities

Right of use assets evolution

Year ended December 31, 2022	Land and Civil Buildings	Industrial Buildings, Plant and Production Equipment	Vehicles, furniture and fixtures	Others	Total
Cost					
Opening net book amount	46,082	131,816	20,256	-	198,154
Currency translation adjustment	52	(414)	(417)	-	(779)
Additions	15,872	31,778	7,674	1,182	56,506
Transfers / Reclassifications	(5,166)	(1,317)	6,483	-	-
Disposals	(13,270)	(36,186)	(3,705)	-	(53,161)
At December 31, 2022	43,570	125,677	30,291	1,182	200,720
Depreciation					
Accumulated at the beginning of the year	24,005	54,727	10,684	-	89,416
Currency translation adjustment	(9)	(139)	(251)	-	(399)
Depreciation charge	8,965	32,767	7,277	210	49,219
Transfers / Reclassifications	(3,974)	1,431	2,543	-	-
Disposals	(10,054)	(35,992)	(3,211)	-	(49,257)
Accumulated at the end of the year	18,933	52,794	17,042	210	88,979
At December 31, 2022	24,637	72,883	13,249	972	111,741

Year ended December 31, 2021	Land and Civil Buildings	Industrial Buildings, Plant and Production Equipment	Vehicles, furniture and fixtures	Total
Cost				
Opening net book amount	41,932	273,358	18,615	333,905
Currency translation adjustment	(187)	(592)	(560)	(1,339)
Additions	6,010	10,127	6,189	22,326
Transfers / Reclassifications	-	(274)	277	3
Disposals (*)	(1,673)	(150,803)	(4,265)	(156,741)
At December 31, 2021	46,082	131,816	20,256	198,154
Depreciation				
Accumulated at the beginning of the year	15,142	67,993	8,817	91,952
Currency translation adjustment	(37)	(177)	(260)	(474)
Depreciation charge	9,882	35,964	5,589	51,435
Transfers / Reclassifications	-	96	(93)	3
Disposals (*)	(982)	(49,149)	(3,369)	(53,500)
Accumulated at the end of the year	24,005	54,727	10,684	89,416
At December 31, 2021	22,077	77,089	9,572	108,738

(*) Includes net disposals of \$96.6 million related to NKK Tubes lease agreement re-measurement due to joint venture termination.

Depreciation of right-of-use assets is mainly included in Tubes segment.

Lease liability evolution

	Year ended December 31,	
	2022	2021
Opening net book amount	117,285	257,343
Translation differences	(3,922)	(11,350)
Additions	56,459	22,261
Cancellations (*)	(5,207)	(103,329)
Repayments (**)	(55,874)	(50,998)
Interest accrued	3,436	3,358
At December 31,	112,177	117,285

(*) For 2021, includes \$95.8 million related to NKK Tubes lease agreement re-measurement due to joint venture termination.

(**) For 2022 includes repayments of \$52.4 million in capital and \$3.5 million of interest, and for 2021 includes repayments of \$48.5 million in capital and \$2.5 million of interest.

As of December 2022, the amount of remaining payments with maturity less than 1 year, between 2 and 5 years and more than 5 years is approximately 25.5%, 47.5% and 27%, respectively.

As of December 2021, the amount of remaining payments with maturity less than 1 year, between 2 and 5 years and more than 5 years was approximately 29.5%, 33.6% and 36.9%, respectively.

Expenses related to short-term leases, leases of low value assets and variable leases (included in *cost of sales and selling, general and administrative expenses*) were not material for the years 2022 and 2021.

13 Investments in non-consolidated companies

	Year ended December 31,	
	2022	2021
At the beginning of the year	1,383,774	957,352
Translation differences	7,336	(11,085)
Equity in earnings of non-consolidated companies	242,743	512,591
Impairment loss in non-consolidated companies (*)	(34,041)	-
Dividends and distributions declared (**)	(64,189)	(78,926)
Increase in equity reserves and others	5,023	3,842
At the end of the year	1,540,646	1,383,774

(*) Includes an impairment of \$19.1 million related to the investment in Usiminas and \$14.9 million related to the joint venture with PAO Severstal ("Severstal"). For more information see note 36.

(**) Related to Ternium and Usiminas. During 2022 and 2021 \$66.2 million and \$75.9 million respectively were collected.

The principal non-consolidated companies are:

Company	Country of incorporation	% ownership at		Book value at December 31,	
		December 31,	December 31,	2022	2021
a) Ternium (*)	Luxembourg	11.46%	11.46%	1,363,607	1,210,206
b) Usiminas (**)	Brazil	3.07%	3.07%	109,534	103,106
c) Techgen	Mexico	22.00%	22.00%	41,506	29,397
d) Global Pipe Company	Saudi Arabia	35.00%	35.00%	23,022	21,523
Others				2,977	19,542
				1,540,646	1,383,774

(*) Including treasury shares.

(**) At December 31, 2022 and 2021 the voting rights were 5.19%.

a) Ternium

Ternium is a steel producer with production facilities in Mexico, Brazil, Argentina, Colombia, the Southern United States and Central America and is one of Tenaris's main suppliers of round steel bars and flat steel products for its pipes business.

At December 31, 2022, the closing price of Ternium's ADSs as quoted on the New York Stock Exchange was \$30.56 per ADS, giving Tenaris's ownership stake a market value of approximately \$702 million. At December 31, 2022, the carrying value of Tenaris's ownership stake in Ternium, based on Ternium's IFRS Financial Statements, was approximately \$1,363.6 million. The Company reviews its participation in Ternium whenever events or circumstances indicate that the asset's carrying amount may not be recoverable. As of December 31, 2022, the Company concluded that the carrying amount does not exceed the recoverable value of the investment.

Summarized selected financial information of Ternium, including the aggregated amounts of assets, liabilities, revenues and profit or loss is as follows:

	Ternium	
	2022	2021
Non-current assets	8,647,510	8,491,363
Current assets	8,844,038	8,606,544
Total assets	17,491,548	17,097,907
Non-current liabilities	1,506,325	1,649,105
Current liabilities	2,216,832	3,213,764
Total liabilities	3,723,157	4,862,869
Total equity	13,768,391	12,235,038
Non-controlling interests	1,922,434	1,700,019
Revenues	16,414,466	16,090,744
Gross profit	3,927,184	6,195,674
Net income for the year attributable to owners of the parent	1,767,516	3,825,068

b) Usiminas

Usiminas is a Brazilian producer of high quality flat steel products used in the energy, automotive and other industries.

As of December 31, 2022, the closing price of the Usiminas' ordinary and preferred shares, as quoted on the B3 - Brasil Bolsa Balcão S.A, was BRL7.41 (\$1.42) and BRL7.16 (\$1.37), respectively, giving Tenaris's ownership stake a market value of approximately \$53.6 million. As of that date, the carrying value of Tenaris's ownership stake in Usiminas was approximately \$109.5 million.

For the year ended December 31, 2022, the Company conducted an impairment test and - mainly due to the lower expectations of steel demand and market steel prices, together with a worsened global macroeconomic situation that derived in the increase in discount rates - wrote down its investment in Usiminas by \$19.1 million. The value-in-use was used to determine the recoverable value. Value-in-use was calculated discounting the estimated cash flows over a five-year period based on forecasts approved by management. For the subsequent years beyond the five-year period, a terminal value was calculated based on perpetuity considering a nominal growth rate of 2%. The discount rate used for such test was 13.5% and is based on the respective WACC, which is considered to be a good indicator of capital cost. The main factors that could result in additional impairment charges in future periods would be an increase of the discount rate, or a deterioration of the macroeconomic situation, steel demand and prices. Management has considered and assessed reasonably possible changes in the key assumptions and has not identified any instances that could give rise to an additional material impairment charge over its investment in Usiminas.

Summarized selected financial information of Usiminas, including the aggregated amounts of assets, liabilities, revenues and profit or loss is as follows:

	Usiminas	
	2022	2021
Non-current assets	3,764,453	3,491,103
Current assets	3,901,844	3,583,814
Total assets	7,666,297	7,074,917
Non-current liabilities	1,671,249	1,575,321
Current liabilities	1,033,524	1,134,663
Total liabilities	2,704,773	2,709,984
Total equity	4,961,524	4,364,933
Non-controlling interests	523,741	467,551
Revenues	6,296,964	6,269,569
Gross profit	1,110,439	2,101,336
Net income for the year attributable to owners of the parent	319,979	1,687,682

c) Techgen

Techgen is a Mexican company that operates a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, Mexico, with a power capacity of 900 megawatts. As of December 31, 2022, Tenaris held 22% of Techgen's share capital, and its affiliates, Ternium and Tecpetrol (both controlled by San Faustin), held 48% and 30% respectively. As of December 31, 2022, the carrying value of Tenaris's ownership stake in Techgen was approximately \$41.5 million.

Techgen entered into certain transportation capacity agreements, equipment and other services related to the equipment, and an agreement for the purchase of clean energy certificates. As of December 31, 2022, Tenaris's exposure under these agreements amounted to \$42.5 million, \$0.9 million and \$17.2 million respectively.

Techgen's sponsors granted certain subordinated loans to Techgen. As of December 31, 2022, the aggregate outstanding principal amount under these subordinated loans was \$264.2 million, of which \$58.1 million correspond to Tenaris's contribution.

On February 13, 2019, Techgen entered into a \$640 million syndicated loan agreement with several banks to refinance an existing loan, resulting in the release of certain corporate guarantees previously issued by Techgen's shareholders to secure the replaced facility.

The existing syndicated loan agreement is "non-recourse" on the sponsors. Techgen's obligations thereunder are guaranteed by a Mexican security trust (covering shares, assets, accounts and contract rights), account pledges and certain direct agreements—customary for these type of transactions—. The commercial terms and conditions governing the purchase by the Company's Mexican subsidiary, Tamsa, of 22% of the energy generated by Techgen remain substantially unchanged.

Under the loan agreement, Techgen is committed to maintain a debt service reserve account covering debt service becoming due during two consecutive quarters; such account is funded by stand-by letters of credit issued for the account of Techgen's sponsors in proportion to their respective participations in Techgen. Accordingly, the Company applied for stand-by letters of credit covering 22% of the debt service coverage ratio, which as of December 31, 2022, amounted to \$10.3 million.

d) GPC

GPC is a Saudi-German joint venture, established in 2010 and located in Jubail, Saudi Arabia, which manufactures LSAW pipes. Tenaris, through its subsidiary SSPC, currently owns 35% of the share capital of GPC. As of December 31, 2022, the carrying value of Tenaris's ownership stake in GPC was approximately \$23 million.

SSPC and the other three owners of GPC have issued corporate guarantees to secure repayment of loan agreements entered into by GPC, with the Saudi Investment Development Fund, the Saudi British Bank, the National Commercial Bank and Banque Saudi Fransi to finance GPC's capital expenditures and working capital. As of December 31, 2022, SSPC's exposure under the guarantees amounted to \$84 million.

In December 2022, EEW, a German company that owns another 35% interest in GPC, expressed its intention to sell its entire interest in GPC for a cash amount of \$9.9 million and a release of EEW's corporate guarantees with respect to GPC's debt. SSPC and another shareholder that owns a 20% interest in GPC exercised their respective rights of first refusal. Each such acquisition is subject to customary conditions, including competition clearance and bank consents. If both acquisitions are consummated, SSPC will acquire a 22.3% additional interest in GPC (thus totaling a 57.3% interest) and will assume a portion of EEW's corporate guarantees (so that SSPC's exposure under the guarantees will increase to \$137.5 million based on debt amounts as of December 31, 2022).

14 Receivables – non current

	Year ended December 31,	
	2022	2021
Employee advances and loans	11,908	8,117
Tax credits (*)	27,333	53,210
Receivables from related parties	67,921	61,841
Legal deposits	9,394	9,041
Advances to suppliers and other advances	28,779	9,878
Receivable Venezuelan subsidiaries	48,659	48,659
Others	17,726	15,142
	211,720	205,888

(*) As of December 31, 2022 and 2021 respectively, included approximately \$8 million and \$36 million related to PIS and COFINS (Federal Social Contributions on Gross Revenues) tax recovery on Brazilian subsidiaries.

15 Inventories, net

	Year ended December 31,	
	2022	2021
Finished goods	1,592,706	1,113,011
Goods in process	936,555	707,665
Raw materials	606,977	358,552
Supplies	542,636	485,815
Goods in transit	530,721	253,324
	4,209,595	2,918,367
Allowance for obsolescence, see note 24 (i)	(222,666)	(245,774)
	3,986,929	2,672,593

16 Receivables and prepayments, net

	Year ended December 31,	
	2022	2021
Prepaid expenses and other receivables	47,419	38,080
Government entities	18,121	2,363
Employee advances and loans	10,701	5,974
Advances to suppliers and other advances	41,549	17,225
Government tax refunds on exports	8,898	8,419
Receivables from related parties	19,184	5,919
Others	41,418	21,502
	187,290	99,482
Allowance for other doubtful accounts, see note 24 (i)	(3,479)	(3,206)
	183,811	96,276

19 Cash and cash equivalents and other investments

	Year ended December 31,	
	2022	2021
Cash and cash equivalents		
Cash at banks	149,424	167,455
Liquidity funds	422,859	105,697
Short-term investments	519,244	44,975
	1,091,527	318,127
Other investments - current		
Fixed income (time-deposit, zero coupon bonds, commercial papers)	196,152	239,742
Bonds and other fixed income	211,953	158,107
Fund investments	30,343	-
	438,448	397,849
Other investments - non-current		
Bonds and other fixed income	113,574	312,619
Others	6,328	7,635
	119,902	320,254

20 Borrowings

	Year ended December 31,	
	2022	2021
Non-current		
Bank borrowings	46,433	111,452
Costs of issue of debt	-	(20)
	46,433	111,432
Current		
Bank borrowings	682,255	219,566
Bank overdrafts	94	60
Costs of issue of debt	(20)	(125)
	682,329	219,501
Total Borrowings	728,762	330,933

The maturity of borrowings is as follows:

	1 year or less	1 - 2 years	2 - 3 years	Over 3 years	Total
At December 31, 2022					
Borrowings	682,329	41,933	3,000	1,500	728,762
Total borrowings	682,329	41,933	3,000	1,500	728,762
Interest to be accrued (*)	26,153	821	64	8	27,046
Total	708,482	42,754	3,064	1,508	755,808

(*) Includes the effect of hedge accounting.

	1 year or less	1 - 2 years	2 - 3 years	Over 3 years	Total
At December 31, 2021					
Borrowings	219,501	107,438	3,994	-	330,933
Total borrowings	219,501	107,438	3,994	-	330,933
Interest to be accrued (*)	2,465	560	13	-	3,038
Total	221,966	107,998	4,007	-	333,971

(*) Includes the effect of hedge accounting.

Significant borrowings include:

In millions of U.S. dollars

Disbursement date	Borrower	Type	Final maturity	Outstanding
2022	Tamsa	Bilateral	2023	100
2022	Maverick	Bilateral	2023	100
2022	Tubos del Caribe	Bilateral	2023	90
2020	Tamsa	Bilateral	2023	80
2022	Siderca	Bilateral	2023	55

As of December 31, 2022, Tenaris was in compliance with all of its covenants.

The weighted average interest rates before tax shown below were calculated using the rates set for each instrument in its corresponding currency as of December 31, 2022 and 2021, considering hedge accounting where applicable.

	2022	2021
Total borrowings	9.45%	2.09%

Breakdown of long-term borrowings by currency and rate is as follows:

Non-current borrowings

Currency	Interest rates	Year ended December 31,	
		2022	2021
USD	Variable	20,000	99,587
SAR	Fixed	18,933	11,845
SAR	Variable	7,500	-
Total non-current borrowings		46,433	111,432

Breakdown of short-term borrowings by currency and rate is as follows:

Current borrowings

Currency	Interest rates	Year ended December 31,	
		2022	2021
USD	Variable	200,350	17,015
USD	Fixed	206,336	-
EUR	Variable	-	1,273
EUR	Fixed	26,829	1,706
MXN	Fixed	141,802	141,861
ARS	Fixed	74,025	8,947
SAR	Variable	3,023	26,022
SAR	Fixed	29,964	22,677
Total current borrowings		682,329	219,501

Borrowings evolution

	Year ended December 31, 2022	
	Non current	Current
At the beginning of the year	111,432	219,501
Translation differences	(18)	(28,705)
Proceeds and repayments, net	49,948	371,500
Interests accrued less payments	158	4,774
Reclassifications	(115,087)	115,087
Increase due to business combinations (*)	-	138
Overdrafts variation	-	34
At the end of the year	46,433	682,329

(*) Related to Parques Eólicos de la Buena Ventura S.A. acquisition, for more information see note 33 to these Consolidated Financial Statements.

21 Deferred tax assets and liabilities

Deferred income taxes are calculated in full on temporary differences under the liability method using the tax rate of each country.

The evolution of deferred tax assets and liabilities during the year is as follows:

Deferred tax liabilities

	Fixed assets	Inventories	Intangible assets and other	Total
At the beginning of the year	669,830	27,508	104,346	801,684
Translation differences	(64)	15	600	551
Charged to other comprehensive income	-	-	1,719	1,719
Income statement (credit) / charge	(94,099)	16,009	7,877	(70,213)
At December 31, 2022	575,667	43,532	114,542	733,741

	Fixed assets	Inventories	Intangible assets and other	Total
At the beginning of the year	702,415	15,255	125,793	843,463
Translation differences	(461)	-	(2,059)	(2,520)
Decrease due to sale of subsidiaries (*)	(637)	-	-	(637)
Charged to other comprehensive income	-	-	4,061	4,061
Income statement (credit) / charge	(31,487)	12,253	(23,449)	(42,683)
At December 31, 2021	669,830	27,508	104,346	801,684

Deferred tax assets

	Provisions and allowances	Inventories	Tax losses	Other	Total
At the beginning of the year	(25,083)	(85,037)	(485,763)	(176,627)	(772,510)
Translation differences	(345)	114	747	(245)	271
Charged to other comprehensive income	-	-	-	954	954
Income statement charge / (credit)	(389)	(95,229)	174,427	18,934	97,743
At December 31, 2022	(25,817)	(180,152)	(310,589)	(156,984)	(673,542)

	Provisions and allowances	Inventories	Tax losses	Other	Total
At the beginning of the year	(21,208)	(85,937)	(480,149)	(206,958)	(794,252)
Translation differences	506	606	80	1,195	2,387
Decrease due to sale of subsidiaries (*)	-	93	-	11	104
Charged to other comprehensive income	-	-	-	2,587	2,587
Income statement charge / (credit)	(4,381)	201	(5,694)	26,538	16,664
At December 31, 2021	(25,083)	(85,037)	(485,763)	(176,627)	(772,510)

(*) Related to Geneva sale. See note 6 to these Consolidated Financial Statements.

Deferred tax assets related to taxable losses of Tenaris subsidiaries are recognized to the extent it is considered probable that future taxable profits will be available, against which such losses can be utilized in the foreseeable future. This amount includes \$300 million related to U.S. subsidiaries mainly due to the recognition of accelerated fiscal depreciations, as well as the amounts related to the acquisition of IPSCO in 2020. The remaining balance mainly corresponds to Tenaris's Saudi Arabian subsidiaries. These subsidiaries have incurred in fiscal losses in the past one or two years. Tenaris has concluded that these deferred tax assets will be recoverable based on the business plans and budgets.

Approximately 100% of the recognized tax losses have an expiration date in more than 5 years or do not expire.

As of December 31, 2022, the net unrecognized deferred tax assets amounted to \$120.4 million. Unrecognized tax credits with expiration dates in less than 1 year, between 2 and 5 years and more than 5 years or without expiration date are approximately 8%, 4% and 88% respectively.

The estimated recovery analysis of deferred tax assets and settlement of deferred tax liabilities, which takes into consideration management assumptions and estimates, is as follows:

	Year ended December 31,	
	2022	2021
Deferred tax assets to be recovered after 12 months	(171,717)	(611,552)
Deferred tax liabilities to be settled after 12 months	688,124	782,128

Deferred income tax assets and liabilities are offset when (1) there is a legally enforceable right to set-off current tax assets against current tax liabilities and (2) when the deferred income taxes relate to the same fiscal authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis. The following amounts, determined after appropriate set-off, are shown in the Consolidated Statement of Financial Position:

	Year ended December 31,	
	2022	2021
Deferred tax assets	(208,870)	(245,547)
Deferred tax liabilities	269,069	274,721
	60,199	29,174

The movement in the net deferred income tax liability account is as follows:

	Year ended December 31,	
	2022	2021
At the beginning of the year	29,174	49,211
Translation differences	822	(133)
Decrease due to sale of subsidiaries	-	(533)
Charged to other comprehensive income	2,673	6,648
Income statement charge / (credit)	27,530	(26,019)
At the end of the year	60,199	29,174

22 Other liabilities

(i) Other liabilities – Non current

	Year ended December 31,	
	2022	2021
Post-employment benefits	108,936	111,904
Other long-term benefits	71,446	71,345
Miscellaneous	49,760	48,432
	230,142	231,681

Post-employment benefits

	Year ended December 31,	
	2022	2021
Unfunded	103,822	103,841
Funded	5,114	8,063
	108,936	111,904

- Unfunded

	Year ended December 31,	
	2022	2021
Values at the beginning of the year	103,841	115,774
Current service cost	6,810	5,728
Interest cost	7,610	5,997
Curtailments and settlements	(64)	(422)
Remeasurements (*)	(4,228)	3,174
Translation differences	(5,657)	(3,716)
Benefits paid from the plan	(5,111)	(13,539)
Reclassified to current liabilities	(461)	(8,884)
Other	1,082	(271)
At the end of the year	103,822	103,841

(*) For 2022 a gain of \$0.1 million is attributable to demographic assumptions and a gain of \$4.1 million to financial assumptions. For 2021 a loss of \$0.7 million is attributable to demographic assumptions and a loss of \$2.5 million to financial assumptions.

The actuarial assumptions for the most relevant plans were as follows:

	Year ended December 31,	
	2022	2021
Discount rate	4% - 7%	1% - 7%
Rate of compensation increase	2% - 3%	0% - 3%

As of December 31, 2022, an increase / (decrease) of 1% in the discount rate assumption of the main plans would have generated a (decrease) / increase on the defined benefit obligation of \$5.2 million and \$5.9 million respectively, and an increase / (decrease) of 1% in the rate of compensation assumption of the main plans would have generated an increase / (decrease) impact on the defined benefit obligation of \$3.2 million and \$2.9 million respectively. The above sensitivity analyses are based on a change in discount rate and rate of compensation while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

- Funded

The amounts recognized in the statement of financial position for the current annual period and the previous annual period are as follows:

	Year ended December 31,	
	2022	2021
Present value of funded obligations	116,617	159,528
Fair value of plan assets	(126,842)	(160,504)
Asset (*)	(10,225)	(976)

(*) In 2022 and 2021, \$14.6 million and \$9 million corresponding to plans with surplus balances that were reclassified within other non-current assets, respectively.

The movement in the present value of funded obligations is as follows:

	Year ended December 31,	
	2022	2021
At the beginning of the year	159,528	176,309
Translation differences	(6,635)	356
Current service cost	154	222
Interest cost	4,293	4,190
Remeasurements (*)	(30,349)	(7,019)
Benefits paid	(10,374)	(14,530)
At the end of the year	116,617	159,528

(*) For 2022 a gain of \$4.8 million is attributable to demographic assumptions and a gain of \$25.6 million to financial assumptions. For 2021 a gain of \$0.4 million is attributable to demographic assumptions and a gain of \$6.6 million to financial assumptions.

The movement in the fair value of plan assets is as follows:

	Year ended December 31,	
	2022	2021
At the beginning of the year	(160,504)	(157,335)
Translation differences	6,639	(250)
Return on plan assets	(4,319)	(3,793)
Remeasurements	20,987	(10,817)
Contributions paid to the plan	(435)	(3,338)
Benefits paid from the plan	10,374	14,530
Other	416	499
At the end of the year	(126,842)	(160,504)

The major categories of plan assets as a percentage of total plan assets are as follows:

	Year ended December 31,	
	2022	2021
Equity instruments	28.8%	49.2%
Debt instruments	67.2%	46.7%
Others	4.0%	4.1%

The actuarial assumptions for the most relevant plans were as follows:

	Year ended December 31,	
	2022	2021
Discount rate	3% - 5%	2% - 3%
Rate of compensation increase	0% - 3%	0% - 3%

The expected return on plan assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected return on plan assets is determined based on long-term, prospective rates of return as of the end of the reporting period.

As of December 31, 2022, an increase / (decrease) of 1% in the discount rate assumption of the main plans would have generated a (decrease) / increase on the defined benefit obligation of \$10.3 million and \$11.9 million respectively, and an increase / (decrease) of 1% in the compensation rate assumption of the main plans would have generated an increase / (decrease) on the defined benefit obligation of \$0.7 million and \$0.7 million respectively. The above sensitivity analyses are based on a change in discount rate and rate of compensation while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

There are no expected employer contributions for the year 2023.

The methods and types of assumptions used in preparing the sensitivity analyses did not change compared to the previous period.

(ii) Other liabilities – Current

	Year ended December 31,	
	2022	2021
Payroll and social security payable	224,630	174,794
Miscellaneous	35,984	28,931
	260,614	203,725

23 Non-current allowances and provisions**Liabilities**

	Year ended December 31,	
	2022	2021
Values at the beginning of the year	83,556	73,218
Translation differences	357	(2,476)
Additional allowance	11,102	13,896
Reclassifications	2,229	4,014
Used and other movements	882	(5,096)
Values at the end of the year	98,126	83,556

24 Current allowances and provisions**(i) Deducted from assets**

	Allowance for doubtful accounts - Trade receivables	Allowance for other doubtful accounts - Other receivables	Allowance for inventory obsolescence
Year ended December 31, 2022			
Values at the beginning of the year	(47,120)	(3,206)	(245,774)
Translation differences	(12)	68	(405)
(Additional) / reversal allowances	223	(346)	(24,901)
Used	1,414	5	48,414
At December 31, 2022	(45,495)	(3,479)	(222,666)
Year ended December 31, 2021			
Values at the beginning of the year	(53,676)	(3,917)	(263,635)
Translation differences	111	227	1,877
Decrease due to sale of subsidiaries (*)	2	10	405
(Additional) / reversal allowances	4,297	379	(23,296)
Used	2,146	95	38,875
At December 31, 2021	(47,120)	(3,206)	(245,774)

(*) Related to Geneva sale. See note 6 to these Consolidated Financial Statements.

(ii) Liabilities

Year ended December 31, 2022	Sales risks	Other claims and contingencies (*)	Total
Values at the beginning of the year	1,468	7,854	9,322
Translation differences	(160)	(97)	(257)
Additional provisions	5,315	4,189	9,504
Reclassifications	-	(2,229)	(2,229)
Used	(3,437)	(1,718)	(5,155)
At December 31, 2022	3,186	7,999	11,185

Year ended December 31, 2021	Sales risks	Other claims and contingencies (*)	Total
Values at the beginning of the year	1,795	10,484	12,279
Translation differences	(3)	(736)	(739)
Additional provisions	3,506	7,596	11,102
Reclassifications	-	(4,014)	(4,014)
Used	(3,830)	(5,476)	(9,306)
At December 31, 2021	1,468	7,854	9,322

(*) Other claims and contingencies mainly include lawsuits and other legal proceedings, including employee, tax and environmental-related claims.

25 Derivative financial instruments**Net fair values of derivative financial instruments**

The net fair values of derivative financial instruments, in accordance with IFRS 13, are:

	Year ended December 31,	
	2022	2021
Derivatives hedging borrowings and investments	6,480	2,472
Other derivatives	24,325	8,843
Contracts with positive fair values	30,805	11,315
Derivatives hedging borrowings and investments	-	(147)
Other derivatives	(7,127)	(11,181)
Contracts with negative fair values	(7,127)	(11,328)
Total	23,678	(13)

Foreign exchange and commodities derivative contracts and hedge accounting

Tenaris applies hedge accounting to certain cash flow hedges of highly probable forecast transactions. The net fair values of exchange rate derivatives and those derivatives that were designated for hedge accounting as of December 31, 2022 and 2021 were as follows:

Purchase currency	Sell currency	Term	Fair Value		Hedge Accounting Reserve	
			2022	2021	2022	2021
MXN	USD	2023	6,571	1,444	(67)	(93)
USD	MXN	2023	-	(838)	-	-
EUR	USD	2023	1,866	(7,670)	(2,786)	(7,430)
USD	EUR	2023	20,783	9,092	23,935	8,258
JPY	USD	2023	-	(269)	-	557
USD	BRL	2023	(2,490)	(1,030)	-	-
USD	KWD	2023	(129)	-	-	-
USD	CAD	2023	404	(246)	-	-
USD	GBP	2023	(11)	(55)	-	-
USD	CNY	2023	(242)	(130)	-	-
BRL	USD	2023	223	(238)	-	-
Others		2023	63	(40)	3	-
Total			27,038	20	21,085	1,292

Purchase Commodity	Term	Fair Value		Hedge Accounting Reserve	
		2022	2021	2022	2021
Houston Ship Channel Gas	2023	(814)	(33)	(814)	(33)
LME Scrap	2023	29	-	(3,148)	-
Iron Ore	2023	12	-	(1,274)	-
Electric Energy	2023	(519)	-	(519)	-
TTF Gas	2023	(2,068)	-	(2,207)	-
Total		(3,360)	(33)	(7,963)	(33)

Following is a summary of the hedge reserve evolution:

(all amounts in thousands of U.S. dollars)

	Equity Reserve Dec-2020	Movements 2021	Equity Reserve Dec-2021	Movements 2022	Equity Reserve Dec-2022
Foreign Exchange & Commodities	(4,771)	6,030	1,259	11,863	13,122
Total Cash flow Hedge	(4,771)	6,030	1,259	11,863	13,122

Tenaris estimates that the cash flow hedge reserve corresponding to derivatives instruments at December 31, 2022 will be recycled to the Consolidated Income Statement during 2023. For information on hedge accounting reserve, see section III.D to these Consolidated Financial Statements.

26 Contingencies, commitments and restrictions on the distribution of profits

(i) Contingencies

Tenaris is from time to time subject to various claims, lawsuits and other legal proceedings, including customer, employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings, the Company is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, the Company has not accrued a provision for the potential outcome of these cases.

If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, the Company was able to make a reliable estimate of the expected loss or range of probable loss and, depending on the likelihood of occurrence, in some of such cases has accrued a provision for such loss but believes that publication of this information on a case-by-case basis would seriously prejudice the Tenaris's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency but has not disclosed its estimate of the range of potential loss.

The Company believes that the aggregate provisions recorded for potential losses in these Consolidated Financial Statements are adequate based upon currently available information. However, if management's estimates prove incorrect, current reserves could be inadequate and the Company could incur a charge to earnings which could have a material adverse effect on its results of operations, financial condition, net worth and cash flows.

Below is a summary description of Tenaris's material legal proceedings which are outstanding as of the date of these Consolidated Financial Statements. In addition, the Company is subject to other legal proceedings, none of which is believed to be material.

- *CSN claims relating to the January 2012 acquisition of Usiminas*

Confab, a Brazilian subsidiary of the Company, is one of the defendants in a lawsuit filed in Brazil by Companhia Siderúrgica Nacional ("CSN") and various entities affiliated with CSN against Confab and several Ternium subsidiaries that acquired a participation in Usiminas' control group in January 2012.

The CSN lawsuit alleges that, under applicable Brazilian laws and rules, the acquirers were required to launch a tag-along tender offer to all non-controlling holders of Usiminas' ordinary shares for a price per share equal to 80% of the price per share paid in such acquisition, or BRL28.8, and seeks an order to compel the acquirers to launch an offer at that price plus interest. If so ordered, the offer would need to be made to 182,609,851 ordinary shares of Usiminas not belonging to Usiminas' control group, and Confab would have a 17.9% share in that offer.

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals maintained the understanding of the first instance court. On August 18, 2017, CSN filed an appeal to the Superior Court of Justice seeking the review and reversal of the decision issued by the Court of Appeals. On March 5, 2018, the court of appeals ruled that CSN's appeal did not meet the requirements for submission to the Superior Court of Justice and rejected the appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected it and ordered that the case be submitted to the Superior Court of Justice. On September 10, 2019, the Superior Court of Justice declared CSN's appeal admissible. On March 7, 2023, the Superior Court of Justice, by majority vote, rejected CSN's appeal. Plaintiffs may still appeal against the Superior Court of Justice's decision. At this time, the Company cannot predict whether CSN will appeal against the decision and, if appealed, the ultimate resolution of the matter.

The Company continues to believe that all of CSN's claims and allegations are groundless and without merit, as confirmed by several opinions of Brazilian legal counsel, two decisions issued by the Brazilian securities regulator ("CVM") in February 2012 and December 2016, the first and second instance court decisions and the March 2023 decision of the Superior Court of Justice referred to above.

- *Veracel cellulose accident litigation*

On September 21, 2007, an accident occurred in the premises of Veracel Celulose S.A. ("Veracel") in connection with a rupture in one of the tanks used in an evaporation system manufactured by Confab. The Veracel accident allegedly resulted in material damages to Veracel. Itaú Seguros S.A. ("Itaú"), Veracel's insurer at the time of the Veracel accident and then replaced by Chubb Seguros Brasil S/A ("Chubb"), initiated a lawsuit against Confab seeking reimbursement of damages paid to Veracel in connection with the Veracel accident. Veracel initiated a second lawsuit against Confab seeking reimbursement of the amount paid as insurance deductible with respect to the Veracel accident and other amounts not covered by insurance. Itaú and Veracel claimed that the Veracel accident was caused by failures and defects attributable to the evaporation system manufactured by Confab. Confab believes that the Veracel accident was caused by the improper handling by Veracel's personnel of the equipment supplied by Confab in violation of Confab's instructions. The two lawsuits were consolidated and are considered by the 6th Civil Court of São Caetano do Sul. However, each lawsuit will be adjudicated separately.

On September 28, 2018, Confab and Chubb entered into a settlement agreement pursuant to which on October 9, 2018, Confab paid an amount of approximately \$3.5 million to Chubb, without assuming any liability for the accident or the claim.

On October 10, 2018, Confab was notified that the court had issued rulings for both lawsuits. Both decisions were unfavorable to Confab:

- With respect to Chubb's claim, the court subsequently homologated the above-mentioned settlement and, accordingly, the claim was finalized.
- With respect to Veracel's claim, Confab was ordered to pay the insurance deductible and other concepts not covered by insurance, currently estimated to amount to BRL91.9 million (approximately \$17.4 million) including interest, fees and expenses. Both parties filed motions for clarification against the court's decision, which were partially granted. Although the contract between Confab and Veracel expressly provided that Confab would not be liable for damages arising from lost profits, the court award would appear to include BRL78.8 million (approximately \$15.10 million) of damages arising therefrom. Confab has additional defense arguments in respect of a claim for lost profits. On December 18, 2018, Confab filed an appeal against the first instance court decision, and on April 30, 2019, Veracel filed its response to the appeal. In June 2022, the court resolved that it lacked jurisdiction to decide on the appeal, which was re-allocated to another court. The parties are currently waiting for the trial of the appeal to be scheduled. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

▪ *Petrobras-related proceedings and claims*

The Company is aware that Brazilian, Italian and Swiss authorities investigated whether certain payments were made prior to 2014 from accounts of entities presumably associated with affiliates of the Company to accounts allegedly linked to individuals related to *Petróleo Brasileiro S.A.* (“Petrobras”) and whether any such payments were intended to benefit the Company’s Brazilian subsidiary *Confab*.

Upon learning of the investigation, the Audit Committee of the Company's Board of Directors engaged external counsel in connection with the Company’s review of these matters. In addition, the Company voluntarily notified the U.S. Securities and Exchange Commission (“SEC”) and the U.S. Department of Justice (“DOJ”) in October 2016. The Company conducted, with the assistance of external counsel, an internal investigation and found no evidence corroborating any involvement by the Company or its directors, officers or employees in respect of improper payments. An internal investigation commissioned by Petrobras also found no evidence that *Confab* obtained any unfair commercial benefit or advantage from Petrobras in return for payments, including improperly obtained contracts. On June 2, 2022, the Company resolved the investigation by the SEC, and the DOJ informed that it had closed its parallel inquiry without taking action. Under the settlement with the SEC, the Company neither admits nor denies the SEC’s findings and on June 24, 2022, paid \$53.1 million in disgorgement and prejudgment interest and \$25 million for a civil penalty to conclude the matter.

In July 2019, the Company learned that the public prosecutors’ office of Milan, Italy, had completed a preliminary investigation into the same alleged payments and had included in the investigation, among other persons, the Company’s Chairman and Chief Executive Officer, two other board members, Gianfelice Rocca and Roberto Bonatti, and the Company’s controlling shareholder, *San Faustin*. The Company is not a party to the proceedings. On March 22, 2022, upon completion of the evidentiary phase of the trial, the acting prosecutor requested the first-instance court in Milan in charge of the case to impose sanctions on the Company's Chairman and Chief Executive Officer, on the other two board members, and on *San Faustin*. The Company’s outside counsel in Italy advised the Company that neither the case file nor the prosecutor’s request contain or identify any evidence of involvement in, or knowledge of, the alleged wrongdoing by any of the three directors. On May 26, 2022, the first-instance court dismissed the case brought by the public prosecutor against the defendants for lack of jurisdiction and stated that the criminal proceeding should not have been initiated. On October 7, 2022, the public prosecutor filed an appeal against the first-instance court’s decision.

In June 2020, the Brazilian public prosecutors’ office requested the indictment of several individuals, including three executives or former executives of *Confab* and a former agent of *Confab*, charging them with the alleged crimes of corruption in relation to contracts executed between 2007 and 2010, and money laundering in relation to payments between 2009 and 2013. These criminal proceedings are underway. Neither the Company nor *Confab* is a party to these criminal proceedings.

In addition, Petrobras and the Brazilian public prosecutors filed civil claims for damages against, among others, *Confab* and the *Confab* executives named in the criminal proceedings referred to above. *Confab* became aware of these civil claims in September 2022. As of December 31, 2022, the aggregate amount of these claims was estimated at BRL284.2 million (or approximately \$54.5 million). The plaintiffs also seek that *Confab* be prohibited from contracting with, or receiving benefits or exemptions from, the Brazilian state for an unspecified term. *Confab* believes these claims do not address either the defense arguments or the evidence available to the plaintiffs in Brazil and presented in other jurisdictions and is vigorously contesting them. At this stage, the Company cannot predict the outcome of these civil proceedings.

- *Putative class actions*

Following the Company's November 27, 2018, announcement that its Chairman and CEO Paolo Rocca had been included in an Argentine court investigation known as the Notebooks Case (a decision subsequently reversed by a higher court), two putative class action complaints were filed in the U.S. District Court for the Eastern District of New York. On April 29, 2019, the court consolidated the complaints into a single case, captioned "In re Tenaris S.A. Securities Litigation", and appointed lead plaintiffs and lead counsel. On July 19, 2019, the lead plaintiffs filed an amended complaint purportedly on behalf of purchasers of Tenaris securities during the putative class period of May 1, 2014, through December 5, 2018. The individual defendants named in the complaint are Tenaris's Chairman and CEO and Tenaris's former CFO. The complaint alleges that during the class period, the Company and the individual defendants inflated the Tenaris share price by failing to disclose that the nationalization proceeds received by Ternium (in which the Company held an 11.46% stake) when Sidor was expropriated by Venezuela were received or expedited as a result of allegedly improper payments made to Argentine officials. The complaint does not specify the damages that plaintiff is seeking. On October 9, 2020, the court granted in part and denied in part the defendants' motions to dismiss. The court partially granted and partially denied the motion to dismiss the claims against the Company and its Chairman and CEO. In addition, the court granted the motions to dismiss as to all claims against San Faustin, Techint, and Tenaris's former CFO. On November 11, 2022, the parties filed a joint notice of settlement announcing a settlement in principle of all claims in the action, subject to finalizing the settlement agreements and court approval. The parties' agreement in principle provides that, in exchange for dismissal of the action and customary releases from class members and with no admission of liability by Tenaris or Mr. Rocca, Tenaris will pay to the class \$9.5 million (inclusive of legal fees to lead plaintiff's counsel). On March 10, 2023, the lead plaintiffs filed a motion for preliminary approval of the class settlement.

- *Administrative proceeding concerning Brazilian tax credits*

Confab is a party to an administrative proceeding concerning the recognition and transfer of tax credits for an amount allegedly exceeding the amount that Confab would have been entitled to recognize and / or transfer. The proceeding resulted in the imposition of a fine against Confab representing approximately 75% of the allegedly undue credits, which was appealed by Confab. On January 21, 2019, Confab was notified of an administrative decision denying Confab's appeal, thereby upholding the tax determination and the fine against Confab. On January 28, 2019, Confab challenged such administrative decision and is currently awaiting a resolution. In case of an unfavorable resolution, Confab may appeal before the courts. The estimated amount of this claim is BRL59.2 million (approximately \$11.3 million). At this stage, the Company cannot predict the outcome of this claim.

- *U.S. patent infringement litigation*

Tenaris Coiled Tubes, LLC ("TCT"), a U.S. subsidiary of the Company, was sued in 2017 by its competitor Global Tubing, alleging defamatory conduct by TCT and seeking a declaration that certain Global Tubing products do not infringe patents held by TCT. TCT counterclaimed that certain Global Tubing products did infringe patents held by TCT, and Global Tubing has since sought to invalidate such patents. On December 13, 2019, Global Tubing filed an amended complaint (including the Company as defendant), alleging, among other things, that TCT and the Company had misled the patent office. On March 20, 2023, the judge granted summary judgment in favor of Global Tubing, concluding that the patents at issue are unenforceable due to inequitable conduct during the patent prosecution process. TCT and the Company are analyzing whether to appeal this judgment. Although it is not possible to predict the final outcome of this matter, the Company believes that any potential losses arising from this case will not be material.

- *U.S. Antidumping Duty and Countervailing Duty Investigations*

On October 27, 2021, the U.S. Department of Commerce (“DOC”) announced the initiation of antidumping duty investigations of oil country tubular goods (“OCTG”) from Argentina, Mexico, and Russia and countervailing duty investigations of OCTG from Russia and South Korea. The investigations were initiated on the basis of a petition by U.S. Steel Tubular Products, Inc., a small number of other U.S. domestic welded OCTG producers, and a steelworkers’ union. On November 22, 2021, the International Trade Commission (“ITC”) made a preliminary determination of injury, allowing the investigations to proceed. Subsequently, the DOC issued affirmative preliminary and final antidumping determinations with respect to imports from Argentina, Mexico and Russia, and final affirmative countervailing duty determinations with respect to imports from Russia and from some Korean exporters. On October 27, 2022, the ITC determined that the imports under investigation caused injury to the U.S. OCTG industry, bringing the investigation phase to a conclusion. Tenaris and other parties have appealed the agency determinations from the investigation to the Court of International Trade. As a result of the investigation, and unless overturned on appeal, Tenaris is required to pay antidumping duty deposits (at a rate of 78.30% for imports from Argentina and 44.93% for imports from Mexico) until such time the imports are reviewed by the DOC to determine whether final duties are necessary for the specific period under review. Tenaris has been paying such deposits since May 11, 2022, reflecting the amount of such deposits in its costs. The deposit rates may be reset periodically based on the results of the review process. It is possible that, through the periodic review process, the deposits may be either returned to Tenaris in whole or in part, or may be increased.

(ii) *Commitments and guarantees*

Set forth is a description of the Tenaris’s main outstanding commitments:

- Certain subsidiaries of the Company entered into a contract with Praxair S.A. for the service of oxygen and nitrogen supply. As of December 31, 2022, the aggregate amount to take or pay the committed volumes for an original 14-year term totaled approximately \$36.4 million.
- A subsidiary of the Company entered into a 25-year contract (effective as of December 1, 2016, through December 1, 2041) with Techgen for the supply of 197 MW (which represents 22% of Techgen’s capacity). Monthly payments are determined on the basis of capacity charges, operation costs, back-up power charges, and transmission charges. As of the seventh contract year (as long as Techgen’s existing or replacing bank facility has been repaid in full), the Company’s subsidiary has the right to suspend or early terminate the contract if the rate payable under the agreement is higher than the rate charged by the *Comisión Federal de Electricidad* (“CFE”) or its successors. The Company’s subsidiary may instruct Techgen to sell to any affiliate, to CFE, or to any other third party all or any part of unused contracted energy under the agreement and the Company’s subsidiary will benefit from the proceeds of such sale.
- A U.S. subsidiary of the Company is a party to a contract with Nucor Steel Memphis Inc. under which it is committed to purchase on a monthly basis a specified minimum volume of steel bars, at prices subject to quarterly adjustments. The contract became effective upon delivery of the first purchase order, which occurred in April 2021, and will remain in force for a 3-year term. As of December 31, 2022, the estimated aggregate contract amount calculated at current prices, is approximately \$85.8 million. The contract gives the subsidiary of the Company the right to temporarily reduce the quantities to be purchased thereunder to 75% of the agreed-upon minimum volume in cases of material adverse changes in prevailing economic or market conditions.
- In connection with the closing of the acquisition of IPSCO, a U.S. subsidiary of the Company entered into a 6-year master distribution agreement (the “MDA”) with PAO TMK (“TMK”) whereby, since January 2, 2020, Tenaris is the exclusive distributor of TMK’s OCTG and line pipe products in United States and Canada. At the end of the MDA’s 6-year term, TMK will have the option to extend the duration of its term for an additional 12-month period. Under the MDA, the Company is required to purchase specified minimum volumes of TMK-manufactured OCTG and line pipe products, based on the aggregate market demand for the relevant product category in the United States in the relevant year. In February 2022, however, the Company and TMK agreed that there shall be no minimum yearly purchase requirement for the OCTG product category for the year ending December 31, 2022, and there shall be no minimum yearly purchase requirement for TMK line pipe products under the MDA neither for the contract year ending December 31, 2022, nor for any subsequent contract year until expiration of the MDA’s term.

- A subsidiary of the Company entered into a contract with the supplier Voestalpine Grobblech GmbH from which it committed to purchase carbon steel for a remaining amount of approximately \$30.2 million to use for manufacturing pipes related to the NFXP-QatarGas project.
- Certain subsidiaries of the Company entered into agreements with Vestas Group for the supply of materials and services related to the construction of a wind farm in Argentina. As of December 31, 2022, the remaining amount related to this commitment was \$47.7 million.
- Certain subsidiaries of the Company entered into a one-year contract, renewable for one additional year, with Ternium USA, Inc., under which they are committed to purchase on a monthly basis specified minimum volumes of steel coils. The contract is effective since March 2022, with deliveries beginning in July 2022 until June 2023. As of December 31, 2022, the aggregate commitment totaled approximately \$6.3 million.
- Certain subsidiaries of the Company entered into a contract with Usiminas from which they committed to purchase steel coils for a total amount of approximately \$183.6 million to use for manufacturing welded pipes for the construction of the Presidente Nestor Kirchner Gas Pipeline (“GPNK”) in Argentina.
- A subsidiary of the Company entered into a contract with the supplier JFE Steel Corporation for the purchase tubular material, including 13 Chrome alloy products following the closure of NKKTubes. For more information see note 35 “Other Information – Agreement to terminate NKKTubes joint venture”.

In addition, Tenaris (i) applied for stand-by letters of credit as well as corporate guarantees covering certain obligations of Techgen as described in note 13 (c), (ii) issued corporate guarantees securing certain obligations of GPC, as described in note 13 (d) and (iii) issued performance guarantees mainly related to long-term commercial contracts with several customers and parent companies for approximately \$3.6 billion as of December 31, 2022.

(iii) Restrictions on the distribution of profits and payment of dividends

In accordance with Luxembourg Law, the Company is required to transfer a minimum of 5% of its net profit for each financial year to a legal reserve until such reserve equals 10% of the issued share capital.

As of December 31, 2022, this reserve is fully allocated and additional allocations to the reserve are not required under Luxembourg law. Dividends may not be paid out of the legal reserve.

The Company may pay dividends to the extent, among other conditions, that it has distributable retained earnings calculated in accordance with Luxembourg law and regulations.

27 Cancellation of title deed in Saudi Steel Pipe Company

In early 2021, the Company learned through the Saudi Ministry of Justice’s online portal that the electronic title deeds to certain land plots of its Saudi Arabian subsidiary SSPC had become inactive due to cancellation by court order.

The affected land plots, with a total surface of 811,284 square meters, are located in Dammam, Saudi Arabia, and were purchased from a private entity on February 2010, pursuant to a written purchase agreement duly executed by SSPC in full compliance with the laws of the Kingdom of Saudi Arabia. The purchase of the land occurred before Tenaris’s acquisition of a 47.79% interest in SSPC in 2019. The affected plots are not part of the production facility of SSPC, have been partially used as a warehouse, and have a carrying value on Tenaris’s financial statements of \$56.2 million.

As of the date hereof, neither the cancellation nor the court order have been notified to SSPC or otherwise been made public by the authorities, and the legal basis for the court order is unknown. On May 4, 2021, SSPC filed a petition with an ad-hoc newly-created special committee at the Saudi Ministry of Justice, seeking to have its title deeds reinstated. The proceeding is still ongoing and, at this time, it is not possible to predict the outcome of this matter.

28 Foreign exchange control measures in Argentina

Beginning in September 2019, the Argentine government has imposed and continues to impose significant restrictions on foreign exchange transactions. Restrictions have tightened significantly over time. The main currently applicable measures are described below:

- Foreign currency proceeds derived from exports of goods must be sold into the Argentine foreign exchange market and converted into Argentine pesos within 60 days (if made to related parties) or 180 days (if made to unrelated parties) from shipment date, or, if collected earlier, within five days of collection.
- Foreign currency proceeds from exports of services must be sold into the Argentine foreign exchange market and converted into Argentine pesos within five business days of collection.
- Access to the Argentine foreign exchange market to pay for imports of services rendered by related parties (including royalties) is generally subject to Argentine Central Bank approval. Effective October 17, 2022, the Argentine Central Bank put in place a new regulation on import of services rendered by non-related parties, pursuant to which the Argentine Central Bank may clear or not the payment of import of services and, if cleared, may determine a payment term equal or different to that being requested. There are no rules on the conditions upon which the Argentine Central Bank may clear or determine alternative payment terms. Effective November 1, 2022, this new regulation replaced previous rules.
- Access to the Argentine foreign exchange market to pay for imports of goods is subject to several restrictions. For example, advance payments or at sight cannot be made, and companies cannot access the official foreign exchange market if they hold cash or investments in excess of \$100 thousand. Earlier this year, the Argentine government imposed additional limits to the amount of import payments that could be made by any single company per month or per year; companies that exceed such limits were required to obtain import financing of at least 180 days from the date of nationalization of the goods, except to the extent the goods qualify under a very limited number of exceptions, such as the import of capital goods and certain raw materials. Effective October 17, 2022, the Argentine government implemented a new system, known as the SIRA system, pursuant to which the Argentine government may clear or not the payment of imports and, if cleared, may determine a payment term equal or different to that being requested. There are no objective conditions upon which the Argentine government may clear the payment of imports or determine alternative payment terms under the SIRA system. The exceptions for the import of capital goods and certain raw materials, including many of those used by the Company's Argentine subsidiaries, still exist under the SIRA system.
- Negotiations with the Argentine authorities to raise the foregoing limits and/or expand the list of exceptions to obtain access to foreign currency to pay for import of goods (including raw materials to manufacture goods in Argentina) are ongoing.
- Access to the Argentine foreign exchange market to pay debt service (principal and interest) for financial debts with related parties requires prior Argentine Central Bank approval, unless the loan proceeds are sold in the Argentine foreign exchange market and converted into Argentine pesos after October 2, 2020, and such debts carry an average life of no less than 2 years.
- Debts with foreign creditors larger than \$2 million maturing on or before December 31, 2023, need to be refinanced in at least 60% of outstanding principal and for a minimum period of 2 years.
- Access to the Argentine foreign exchange market to make dividend payments requires prior Argentine Central Bank approval.

When required, Argentine Central Bank approvals are rarely, if ever, granted.

Tenaris's financial position in Argentine peso as of December 31, 2022, amounted to a net short exposure of approximately \$127 million. As of December 31, 2022, the total equity of Argentine subsidiaries represented approximately 10.6% of Tenaris's total equity and the sales performed by Argentine subsidiaries during the year ended on December 31, 2022, amounted approximately to 20% of Tenaris's total sales. Assets and liabilities denominated in Argentine peso as of December 31, 2022, have been valued at the prevailing official exchange rates.

Management continues to monitor closely the evolution of the main variables affecting its business, identifying the potential impact thereof on its financial and economic situation and determining the appropriate course of action in each case. The Company's Consolidated Financial Statements should be read taking into account these circumstances.

This context of volatility and uncertainty remains in place as of the issue date of these Consolidated Financial Statements. If restrictions to access the official foreign exchange market continue to be maintained, or are further tightened, our Argentine subsidiaries could be restricted from making payment of imports for key steelmaking inputs (which would adversely affect their operations), or would need to resort to alternative, more expensive arrangements (which would adversely affect their results of operations).

On August 19, 2022, the Board of Directors of Siderca S.A.I.C., an Argentine subsidiary of the Company, approved the distribution of a dividend in kind of approximately ARS7,394 million paid in Argentine sovereign bonds, which in the Argentine market had a valuation of approximately \$54.4 million. Considering that, as a result of the foreign exchange restrictions described above, the value of such bonds in the international market was approximately \$24.6 million, the Company recorded a loss of approximately \$29.8 million in *Other Financial Results*.

29 Cash flow disclosures

	Year ended December 31,		
	2022	2021	2020
(i) Changes in working capital (*)			
Inventories	(1,329,865)	(1,085,024)	818,913
Receivables and prepayments and current tax assets	(155,449)	(79,912)	67,610
Trade receivables	(1,208,278)	(356,069)	414,826
Other liabilities	57,389	4,892	(36,000)
Customer advances	151,066	44,661	(29,253)
Trade payables	353,892	399,988	(180,807)
	(2,131,245)	(1,071,464)	1,055,289
(ii) Income tax accruals less payments			
Tax accrued	617,236	189,448	23,150
Taxes paid	(359,585)	(153,846)	(140,364)
	257,651	35,602	(117,214)
(iii) Interest accruals less payments, net			
Interest accrued	(34,080)	(14,371)	8,627
Interest received	68,335	24,567	19,613
Interest paid	(32,775)	(21,559)	(28,778)
	1,480	(11,363)	(538)

(*) Changes in working capital do not include non-cash movements due to the variations in the exchange rates used by subsidiaries with functional currencies different from the U.S. dollar.

30 Related party transactions

As of December 31, 2022:

- San Faustin owned 713,605,187 shares in the Company, representing 60.45% of the Company's capital and voting rights.
- San Faustin owned all of its shares in the Company through its wholly-owned subsidiary Techint Holdings S.à.r.l., a Luxembourg société à responsabilité limitée ("Techint"), who is the holder of record of the above-mentioned Tenaris shares.
- Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin, a private foundation located in the Netherlands (Stichting) ("RP STAK") held voting shares in San Faustin sufficient in number to control San Faustin.
- No person or group of persons controls RP STAK.

Based on the information most recently available to the Company, Tenaris's directors and senior management as a group owned 0.07% of the Company's outstanding shares.

Transactions and balances disclosed as with “non-consolidated parties” are those with companies over which Tenaris exerts significant influence or joint control in accordance with IFRS, but does not have control. All other transactions and balances with related parties which are not non-consolidated parties and which are not consolidated are disclosed as “Other”. The following transactions were carried out with related parties:

(i) Transactions	Year ended December 31,		
	2022	2021	2020
(a) Sales of goods and services			
Sales of goods to non-consolidated parties	100,019	71,879	20,183
Sales of goods to other related parties	151,884	76,467	18,243
Sales of services to non-consolidated parties	5,407	4,161	5,829
Sales of services to other related parties	109,123	49,268	5,049
	366,433	201,775	49,304
(b) Purchases of goods and services			
Purchases of goods to non-consolidated parties	656,877	294,929	84,485
Purchases of goods to other related parties	51,040	32,453	12,892
Purchases of services to non-consolidated parties	13,759	9,763	6,979
Purchases of services to other related parties	36,767	13,806	18,133
	758,443	350,951	122,489
(ii) Period-end balances	At December 31,		
	2022	2021	
(a) Arising from sales / purchases of goods / services			
Receivables from non-consolidated parties		69,135	66,896
Receivables from other related parties		78,370	33,122
Payables to non-consolidated parties		(142,228)	(45,092)
Payables to other related parties		(13,283)	(2,125)
		(8,006)	52,801
(b) Financial debt			
Finance lease liabilities from non-consolidated parties		(1,650)	(1,936)
Finance lease liabilities from other related parties		(483)	(624)
		(2,133)	(2,560)

In addition to the tables above, the Company issued various guarantees in favor of Techgen and GPC; for further details, please see note 13 (c and d) and note 26 (ii) to these Consolidated Financial Statements. No other material guarantees were issued in favor of other related parties.

Directors and senior management compensation

During the years ended December 31, 2022, 2021 and 2020, the cash compensation of Directors and Senior managers amounted to \$35.2 million, \$37.7 million and \$27.4 million respectively. These amounts include cash benefits paid to certain senior managers in connection with the pre-existing retirement plans. In addition, Directors and Senior managers received 437, 382 and 522 thousand units for a total amount of \$5.1 million, \$3.9 million and \$5 million respectively in connection with the Employee retention and long-term incentive program mentioned in note II.P.3 “Employee benefits – Other long-term benefits” to these Consolidated Financial Statements.

31 Principal accountant fees

Total fees accrued for professional services rendered by PwC Network firms to Tenaris S.A. and its subsidiaries are detailed as follows:

	Year ended December 31,		
	2022	2021	2020
Audit fees	3,966	3,804	3,781
Audit-related fees	255	220	134
Tax fees	-	-	102
All other fees	11	5	-
Total	4,232	4,029	4,017

32 Principal subsidiaries

The following is a list of Tenaris's principal subsidiaries and its direct and indirect percentage of ownership of each controlled company at December 31, 2022.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2022	2021	2020
ALGOMA TUBES INC.	Canada	Manufacturing of welded and seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
HYDRIL COMPANY and subsidiaries	USA	Manufacture and marketing of premium connections	100%	100%	100%
IPSCO TUBULARS INC. and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	89%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
SAUDI STEEL PIPE CO.	Saudi Arabia	Manufacturing of welded steel pipes	48%	48%	48%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA INDUSTRIAL Y COMERCIAL and subsidiaries (a)	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPessoal LDA.	Portugal	Holding Company	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company, marketing and distribution of steel products	100%	100%	100%
TENARIS INVESTMENTS (NL) B.V. and subsidiaries	Netherlands	Holding company	100%	100%	100%
TENARIS INVESTMENTS S.à.r.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS QINGDAO STEEL PIPES LTD.	China	Processing of premium joints, couplings and automotive components	100%	100%	100%
TENARIS TUBOCARIBE LTDA.	Colombia	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris holds 51% of NKKTubes.

(b) Tenaris holds 98.4% of Tenaris Supply Chain S.A. and 40% of Tubular Technical Services Ltd. and Pipe Coaters Nigeria Ltd., 49% of Amaja Tubular Services Limited and 60% of Tenaris Baogang Baotou Steel Pipes Ltd, and until 2021 held 49% of Tubular Services Angola Lda.

33 Business combinations

Acquisition of Parques Eólicos de la Buena Ventura S.A.

In connection with the construction of a wind farm in Argentina, in April 2022, Tenaris acquired 100% of the shares of Parques Eólicos de la Buena Ventura S.A. for a price of \$4.1 million, which was fully paid. The fair value of the acquired assets and liabilities amounted to \$4.1 million, the same value of the consideration paid. Accordingly, no goodwill was recognized.

Had the acquisition occurred on January 1, 2022, Tenaris's unaudited pro forma net sales and net income from continuing operations would not have changed materially.

34 Nationalization of Venezuelan subsidiaries

In May 2009, within the framework of Decree Law 6058, Venezuela's President announced the nationalization of, among other companies, the Company's majority-owned subsidiaries TAVSA - Tubos de Acero de Venezuela S.A. ("Tavsa") and, Matesi Materiales Siderúrgicos S.A. ("Matesi"), and Complejo Siderúrgico de Guayana, C.A. ("Comsigua"), in which the Company has a non-controlling interest (collectively, the "Venezuelan Companies"). Tenaris and its wholly-owned subsidiary, Talta - Trading e Marketing Sociedad Unipessoal Lda ("Talta"), initiated arbitration proceedings against Venezuela before the ICSID in Washington D.C. in connection with these nationalizations and obtained favorable awards, which are final and not subject to further appeals.

Matesi

On January 29, 2016, the tribunal released its award on the arbitration proceeding concerning the nationalization of Matesi. The award upheld Tenaris's and Talta's claim that Venezuela had expropriated their investments in Matesi in violation of Venezuelan law as well as the bilateral investment treaties entered into by Venezuela with the Belgium-Luxembourg Economic Union and Portugal. The award granted compensation in the amount of \$87.3 million for the breaches and ordered Venezuela to pay an additional amount of \$85.5 million in pre-award interest, aggregating to a total award of \$173 million (including \$0.2 million of legal fees), payable in full and net of any applicable Venezuelan tax, duty or charge. The tribunal granted Venezuela a grace period of six months from the date of the award to make payment in full of the amount due without incurring post-award interest, and resolved that if no, or no full, payment is made by then, post-award interest will apply at the rate of 9% per annum compounded at six-monthly rests from the date of the award until payment in full. As of December 31, 2022, post-award interest calculated at the award rate amounted to approximately \$144.7 million and, accordingly, the total amount owed by Venezuela under the award as of December 31, 2022 was \$317.7 million.

On June 8, 2018, Tenaris and Talta filed an action in federal court in the District of Columbia to recognize and enforce the award in the United States. On July 17, 2020, the Court entered judgment recognizing the Matesi award. The judgment orders Venezuela to pay to Tenaris and Talta an amount of \$256.4 million, including principal and post-award interest through the judgment date, and provides for post-judgment interest to accrue on this sum at the U.S. federal statutory rate. As of December 31, 2022, post-judgment interest calculated at the U.S. judgment rate amounted to approximately \$0.9 million and, accordingly, the total amount owed by Venezuela under the U.S. judgment as of December 31, 2022 was \$257.3 million. The U.S. judgment, however, may not be enforced in the United States to the extent prohibited by the Venezuelan sanctions regulations issued by the U.S. Treasury Department's Office of Foreign Assets Control currently in effect.

Tavsa and Comsigua

On December 12, 2016, the tribunal issued its award upholding Tenaris's and Talta's claim that Venezuela had expropriated their investments in Tavsa and Comsigua in violation of the bilateral investment treaties entered into by Venezuela with the Belgium-Luxembourg Economic Union and Portugal. The award granted compensation in the amount of \$137 million and ordered Venezuela to pay an additional amount of \$76 million in pre-award interest and to reimburse Tenaris and Talta \$3.3 million in legal fees and ICSID administrative costs. In addition, Venezuela was ordered to pay interest from April 30, 2008 until the day of effective payment at a rate equivalent to LIBOR + 4% per annum. As of December 31, 2022, post-award interest calculated at the award rate amounted to approximately \$85.1 million and, accordingly, the total amount owed by Venezuela under the award as of December 31, 2022 was \$301.4 million.

On June 8, 2018, Tenaris and Talta filed an action in federal court in the District of Columbia to recognize and enforce the award in the United States. On August 24, 2021, the court entered judgment in favor of Tenaris and Talta and against Venezuela in the amount of \$276.9 million, with post-judgment interest accruing from the date of judgment at the federal statutory post-judgment interest rate. On November 5, 2021, the court, in response to a motion by Tenaris and Talta, amended the judgment amount to \$280.7 million, with post-judgment interest continuing to accrue from August 24, 2021 at the federal statutory post-judgment interest rate. As of December 31, 2022, post-judgment interest calculated at the U.S. judgment rate amounted to approximately \$0.2 million and, accordingly, the total amount owed by Venezuela under the U.S. judgment as of December 31, 2022 was \$280.9 million. The U.S. judgment, however, may not be enforced in the United States to the extent prohibited by the Venezuelan sanctions regulations issued by the U.S. Treasury Department's Office of Foreign Assets Control currently in effect.

Transfer of the Awards and Judgements

On January 25, 2023, Tenaris and Talta entered into an awards purchase agreement with an unaffiliated purchaser pursuant to which Tenaris and Talta agreed to sell all of their rights, title and interests in the above-referenced claims, awards and judgements, including all post-award or post-judgment interest accruing on the awards and judgements, for a purchase price of \$81 million, plus a non-refundable signing payment of \$1 million as reimbursement of expenses. The transfer of the awards and judgements is subject to the Office of Foreign Assets Control ("OFAC") approval, and according to the agreement must be obtained by February 25, 2024. The uncertainty associated with the OFAC approval is factored into the fair value determination of the related receivable. See note III.B.

35 Other relevant information

Agreement to terminate NKKTubes joint venture

Tenaris's seamless pipe manufacturing facility in Japan, located in the Keihin steel complex owned by JFE Holdings Inc. ("JFE"), is operated by NKKTubes, a company owned 51% by Tenaris and 49% by JFE. Steel bars and other essential inputs and services for NKKTubes are supplied under a long-term agreement by JFE.

On March 27, 2020, JFE informed Tenaris of its decision to permanently cease as from JFE's fiscal year ending March 2024 the operations of its steel manufacturing facilities located at the Keihin complex. In light of that development, Tenaris and JFE engaged in discussions and ultimately determined that the project was no longer economically sustainable. Accordingly, on November 2, 2021, Tenaris and JFE agreed to terminate amicably their joint venture and liquidate NKKTubes, and on November 2, 2022, entered into a definitive wrap-up agreement. Under these agreements:

- a) NKKTubes' manufacturing and production operations were closed by June 30, 2022;
- b) the lease agreement of the Keihin steel complex between JFE and NKKTubes was terminated as of September 30, 2022;
- c) all tangible fixed assets owned by NKKTubes and placed in the Keihin steel complex were either purchased by JFE or removed and disposed of;
- d) NKKTubes started its liquidation process on November 30, 2022;
- e) all agreements that allowed the operation of the joint venture will terminate progressively in accordance with NKKTubes' operational needs until liquidation is accomplished;
- f) all agreements with local Japanese customers and subcontractors were terminated;
- g) the intangible assets belonging to NKKTubes will be allocated between the parties based on agreements still under negotiation; and
- h) all related dissolution and liquidation costs were allocated between the parties.

In July, 2022, Tenaris and JFE entered into an agreement for the provision of tubular material, including *13 Chrome* alloy products, thereby ensuring a continued supply of such products to international customers after NKKTubes' closure.

Management determined that the parties' decision to terminate the NKKTubes joint venture constituted an impairment indicator, conducted an impairment test, and as of December 2021, recognized a charge of approximately \$57 million, impacting NKKTubes' property, plant and equipment and intangible assets.

During 2022, as result of NKKTubes' closure, the currency translation adjustment reserve belonging to the shareholders was reclassified to the income statement for an amount of \$71.2 million.

As of December 31, 2022, the net non-controlling interests' reserve amounts to approximately \$13.2 million. This balance will be reclassified through the Company's results in the period when the final liquidation of NKKTubes occurs.

Agreement for acquisition of Benteler Steel & Tube Manufacturing Corporation

On July 7, 2022, the Company entered into a definitive agreement to acquire from Benteler North America Corporation, a Benteler Group company, 100% of the shares of Benteler Steel & Tube Manufacturing Corporation, a U.S. producer of seamless steel pipes. The agreement provided that either party could unilaterally terminate the agreement in case that the conditions precedent to closing had not been satisfied by January 3, 2023. On February 5, 2023, Tenaris announced that Benteler North America Corporation had exercised its right to unilaterally terminate, effective immediately, the acquisition agreement and, accordingly, the transaction will not proceed.

36 The Russia-Ukraine armed conflict and its impact on Tenaris's operations

On February 24, 2022, Russia launched a military attack on Ukraine. In response, several jurisdictions, including the United States, the European Union and the United Kingdom imposed a wave of sanctions against certain Russian institutions, companies and citizens. The Russian government retaliated by ordering several economic counter measures, including restrictions on residents transferring foreign currency abroad.

Tenaris has so far found alternative sources in response to the interruption in supplies from Ukraine and the impact of sanctions on supplies from Russia but may still be faced with supply delays or forced to pay higher prices to secure the raw materials, in particular energy, required for its steelmaking operations. Although it is hard to predict how energy and commodity prices will continue to behave as the conflict unfolds, higher prices and possible shortages of energy and raw materials used in Tenaris's steelmaking operations would result in higher production costs and potential plant stoppages, affecting its profitability and results of operations.

Tenaris's sales to Russian customers were not material in the year ended December 31, 2022. All sales to Russian customers and all purchases from Russian suppliers were made in compliance with applicable regulations. There are no significant exposures or credit loss effects related to Russian counterparties, and the conflict has not created any uncertainty on the value of financial instruments. The currently ongoing events have not changed significant judgements taken into consideration when performing impairments tests, nor have they raised going concern risks. In addition, Tenaris is assessing the closure of its representative office in Moscow, which is currently not operative.

In light of the armed conflict and the designation of Severstal's controlling shareholder as person subject to EU and UK sanctions, in March 2022, Tenaris recorded an impairment in the amount of approximately \$14.9 million in connection with its investment in a joint venture in Russia with Severstal. See note 13.

37 Climate change

Tenaris carefully assesses the potential impact of climate change and energy transition on its business and on the risks to its markets and its tangible and intangible assets, and adapts its business strategy accordingly.

In February 2021 Tenaris set a medium-term target to reduce its carbon emissions intensity rate by 30% by 2030, compared to a 2018 baseline, considering Scopes 1 and 2 emissions plus Scope 3 emissions related to raw materials and steel purchased from third parties. The Company aims to achieve this target by using a higher proportion of recycled steel scrap in the metallic mix and by making investments to increase energy efficiency and the use of renewable energy in its energy requirements. This medium-term target forms part of a broader objective of decarbonizing our operations and reaching carbon neutrality. At the same time, the Company is increasing its sales for low-carbon energy applications, such as hydrogen, geothermal and carbon capture and storage. These sales currently account for a relatively small proportion of overall sales but are expected to grow in the coming years.

In its assessment, Tenaris also considers that the countries in which it operates and its customers are also establishing their own decarbonization strategies and objectives, and that some customers are requesting specific information from their suppliers, including Tenaris, concerning the carbon emissions and Environmental, Social and Governance ("ESG") practices in their supply chain, and that they may adjust their supply practices in light of that information.

The recoverable value assessments performed by the Company for purposes of the preparation of these financial statements reflect management's views on energy transition and climate change and their potential medium- and long-term impact on Tenaris's operations and its sales. In addition, the Company carefully monitors the medium- and long-term outlook scenarios published by leading industry experts on how the energy transition could affect global demand for energy and oil and gas and how this could affect the global demand for tubular products and its sales. Furthermore, estimates and assumptions used in the Company's impairment tests over long-lived assets and goodwill, useful lives of assets, capital and research and development expenditures, inventory valuation, recovery of deferred tax assets and provisions, and contingent liabilities are based on available information and current government regulations on energy transition and climate-related matters, as well as on Tenaris's current short-term investment plans. As of the date of these financial statements, the Company does not believe that climate-related matters should trigger any material adjustments to the conclusions of its impairment tests.

38 Events after the reporting period

Annual Dividend Proposal

Upon approval of the Company's annual accounts in March 2023, the Board of Directors intends to propose, for the approval of the Annual General Shareholders' meeting to be held on May 3, 2023, the payment of an annual dividend of \$0.51 per share (\$1.02 per ADS), or approximately \$602 million, which includes the interim dividend of \$0.17 per share (\$0.34 per ADS) or approximately \$201 million, paid on November 23, 2022. If the annual dividend is approved by the shareholders, a dividend of \$0.34 per share (\$0.68 per ADS), or approximately \$401 million will be paid on May 24, 2023, with an ex-dividend date of May 22, 2023. These Consolidated Financial Statements do not reflect this dividend payable.

39 Update as of March 31, 2023¹

Contingencies, commitments and restrictions on the distribution of profits updates

Information contained in note 26 "Contingencies, commitments and restrictions on the distribution of profits" was amended reflecting the latest updates on the following cases: "CSN claims relating to the January 2012 acquisition of Usiminas", "Putative class actions" and "U.S. patent infringement litigation".

Tenaris to Increase its participation in Usiminas control group

On March 30, 2023, the Company's subsidiary, Confab, together with Tenaris's affiliates Ternium Investments and Ternium Argentina, all of which compose the T/T Group within Usiminas control group, entered into a share purchase agreement to acquire from the NSC Group, pro rata to their current participations in the T/T Group, 68.7 million ordinary shares of Usiminas at a price of BRL10 (approximately \$1.9) per ordinary share. Pursuant to the transaction, Tenaris would pay approximately BRL 110 million (approximately \$21 million) in cash for 11 million ordinary shares, increasing its participation in the Usiminas control group to 9.8%. Upon the closing of this transaction, the T/T Group will hold an aggregate participation of 61.3% in the control group, with the NSC Group and Previdência Usiminas (Usiminas employees' pension fund) holding 31.7% and 7.1%, respectively. The transaction is subject to approval by Brazil's antitrust authorities and will be financed with cash on hand.

The Company will continue having significant influence over Usiminas and consequently will continue accounting for its investment under the equity method.

At closing, the existing Usiminas shareholders agreement will be replaced by a new shareholders agreement setting forth a new governance structure for Usiminas. The T/T Group will nominate a majority of the Usiminas board of directors, the chief executive officer and four other members of the Usiminas board of officers. Of the positions allocated to the T/T group, Tenaris will retain the right to nominate one member of the Usiminas board of directors and one members of the Usiminas board of officers. Ordinary decisions may be approved with a 55% majority of Usiminas' control group shares.

At any time after the second anniversary of the closing of the transaction, the T/T Group will have the right to buy the NSC Group's remaining interest in the Usiminas control group (153.1 million ordinary shares) at the higher of BRL10 per share and the 40-trading day average price per share immediately prior to the date of exercising the option. In addition, the NSC Group will have the right, at any time after the closing of the transaction, to withdraw its remaining shares from the control group and sell them in the open market after giving the T/T Group the opportunity to buy them at the 40-trading day average price per share, as well as the right, at any time after the second anniversary of the closing, to sell such shares to the T/T Group at BRL10 per share. Confab will have the right to participate in each such transaction pro rata to its current participation in the T/T group.

The Company will account for the transaction if and when the conditions precedent to closing are satisfied and the acquisition is completed.

¹This note was added subsequently to the approval of these Consolidated Financial Statements by the Company's Board of Directors on February 15, 2023.

Description of securities

The shares of Tenaris S.A. (the “Company”) are listed on the Mexican Stock Exchange and its ADSs are listed on the NYSE under the symbol “TS”. The shares are also listed on the Italian Stock Exchange under the symbol “TEN”. Trading on the NYSE and the Mexican Stock Exchange began on December 16, 2002, and trading on the Italian Stock Exchange began on December 17, 2002.

Memorandum and Articles of Association

The Company’s authorized share capital is fixed by the Company’s articles of association as amended from time to time with the approval of shareholders at an extraordinary general shareholders’ meeting. The Company has an authorized share capital of a single class of 2,500,000,000 shares having a nominal value of USD1.00 per share. There are currently 1,180,536,830 shares issued. All issued shares are fully paid.

The Company’s articles of association authorize the board of directors, or any delegate(s) duly appointed by the board of directors, to issue shares within the limits of the authorized share capital against contributions in cash, contributions in kind or by way of available reserves, at such time and on such terms and conditions, including the issue price, as the board of directors, or its delegate(s), may in its or their discretion resolve.

The Company’s extraordinary shareholders’ meeting held on June 2, 2020 approved the renewal for an additional five-year period of the authorization granted to the board of directors to waive, suppress or limit any preemptive subscription rights of shareholders provided for by law to the extent it deems such waiver, suppression or limitation advisable for any issue or issues of shares within the authorized share capital; and have waived any preemptive subscription rights provided for by law and related procedures. The validity period of such authorization will expire on June 12, 2025. However, under the Company’s articles of association, the Company’s existing shareholders shall have a preferential right to subscribe for any new shares issued pursuant to the authorization granted to its board of directors, except in the following cases (in which cases no preemptive subscription rights shall apply):

- any issuance of shares (including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash; *and*
- any issuance of shares (including by way of free shares or at discount), up to an amount equal to 1.5% of the issued share capital of the Company, to directors, officers, agents or employees of the Company, its direct or indirect subsidiaries, or its affiliates, including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive for any such persons or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit).

Amendment of the Company’s articles of association requires the approval of shareholders at an extraordinary shareholders’ meeting with a two-thirds majority vote of the shares represented at the meeting.

Dividends

Subject to applicable law, all shares (including shares underlying ADSs) are entitled to participate equally in dividends when, as and if declared by the shareholders at the annual general shareholders' meeting, out of funds legally available for such purposes.

Dividends may be lawfully declared and paid if the Company's net profits and distributable reserves are sufficient under Luxembourg law. The amount and payment of dividends must be approved by a majority vote at a general shareholders' meeting, generally, but not necessarily, based on the recommendation of the Company's board of directors. Under Article 21 of the Company's articles of association, the board of directors has the power to distribute interim dividends out of profits, share premium or any other available reserves, in accordance with applicable law, in particular in accordance with the conditions set forth in Article 461-3 of the Luxembourg Company Law. Such dividend payments must be finally approved by the general shareholders' meeting.

As provided by Article 21 of the Company's articles of association, dividends or other distributions declared by the general meeting as well as interim dividends or other distributions declared by the board of directors will be distributed at the times and places determined by the board of directors. The Company will make any and all dividend payments and any other distributions in respect of shares registered in the name of any securities settlement system or operator of such a system or in the name of any financial institution or other professional depository of securities or any other depository, whether in cash, shares or other assets, only to such registered holder, or otherwise in accordance with such registered holder's instructions, and, as provided by Article 21 of the Company's articles of association, that payment shall release the Company from any and all obligations for such payment.

The Company conducts and will continue to conduct its operations through subsidiaries and, accordingly, its main source of cash to pay dividends, among other possible sources, will be the dividends received from its subsidiaries.

Under Luxembourg law, claims for dividends will lapse in favor of the Company five years after the date such dividends are declared. However, the Company may elect to pay a declared dividend after such period. Declared and unpaid dividends held by the Company for the account of its shareholders do not bear interest.

Pursuant to Luxembourg law, at least 5% of our net profits per year must be allocated to the creation of a legal reserve until such reserve has reached an amount equal to 10% of our issued share capital. If the legal reserve later falls below the 10% threshold, at least 5% (or such lower amount required to reach the 10% threshold) of net profits again must be allocated toward the reserve. As of December 31, 2022, the Company's legal reserve represented 10% of its share capital. The legal reserve is not available for distribution.

Shareholders' Meetings; Voting Rights; Election of Directors

Each share entitles the holder thereof to one vote at the Company's general shareholders' meetings. Shareholder action by written consent is not permitted, but proxy voting is permitted. Notices of general shareholders' meetings are governed by the provisions of Luxembourg law and the Company's articles of association. Pursuant to applicable Luxembourg law, the Company must give notice of the calling of any general shareholders' meeting at least 30 days prior to the date for which the meeting is being called, by publishing the relevant convening notice in the *Recueil Electronique des Sociétés et Associations* (Luxembourg's electronic official gazette) and in a leading newspaper having general circulation in Luxembourg and by issuing a press release informing of the calling of such meeting. In case the Company's shares are listed on a foreign regulated market, notices of general shareholders' meetings shall also comply with the requirements (including as to content and publicity) and follow the customary practices of such regulated market.

Pursuant to the Company's articles of association, for as long as the shares or other securities of the Company are listed on a regulated market within the European Union (as they currently are), and unless otherwise provided by applicable law, only shareholders holding shares as of midnight, central European time, on the day that is fourteen days prior to the day of any given general shareholders' meeting can attend and vote at such meeting. The board of directors may determine other conditions that must be satisfied by shareholders in order to participate in a general shareholders' meeting in person or by proxy, including with respect to deadlines for submitting supporting documentation to or for the Company.

No attendance quorum is required at ordinary general shareholders' meetings, and resolutions may be adopted by a simple majority of the votes validly cast, irrespective of the number of shares present or represented. Unless otherwise provided by applicable law, an extraordinary general shareholders' meeting may not validly deliberate on proposed amendments to the Company's articles of association unless a quorum of at least half of the share capital is represented at the meeting. If a quorum is not reached at the first extraordinary shareholders' meeting, a second extraordinary shareholders' meeting may be convened in accordance with the Company's articles of association and applicable law and such second extraordinary general shareholders' meeting shall validly deliberate regardless of the number of shares represented. In both cases, the Luxembourg Company Law and the Company's articles of association require that any resolution of an extraordinary general shareholders' meeting as to amendments to the Company's articles of association be adopted by a two-thirds majority of the votes validly cast at the meeting. If a proposed resolution consists of changing the Company's nationality or of increasing the shareholders' commitments, the unanimous consent of all shareholders is required.

Cumulative voting is not permitted. The Company's articles of association do not provide for staggered terms and directors are elected for a maximum of one year but may be reappointed or removed at any time, with or without cause, by the general shareholders' meeting, by resolution passed by a simple majority vote of the shares validly cast at the meeting. In the case of a vacancy occurring in the board of directors, the remaining directors shall have the right to temporarily fill such vacancy with a temporary director appointed by resolution adopted with the affirmative vote of a majority of the remaining directors; provided that the next general shareholder's meeting shall be called upon to ratify such appointment. The term of any such temporary director elected to fill a vacancy shall expire at the end of the term of office of the replaced director.

The articles of association provide that annual general shareholders' meetings shall meet in Luxembourg within six months from the end of the previous financial year at the date, place and hour indicated in the convening notice. The rights of the shareholders attending the meetings are governed by Shareholders' Rights Law.

Holders of shares deposited in fungible securities accounts have the same rights and obligations as holders of shares recorded in the Company's share register. However, in order to be able to participate in and vote at shareholders' meetings of the Company, the former must submit, prior to the relevant meeting, reasonably satisfactory evidence to the Company as to the number of shares held on the applicable record date for such meeting. For as long as the shares or the other securities of the Company are listed on a regulated market within the European Union, participation in a shareholders' general meeting shall *inter alia* be subject to the relevant shareholder holding shares of the Company on the fourteenth day midnight Central European Time prior to the meeting (unless otherwise provided for by applicable law).

Holders of ADSs only have those rights that are expressly granted to them in the deposit agreement. ADS holders may not attend or directly exercise voting rights in shareholder' meetings, but holders of record of our ADSs as of the relevant ADS holders' record date set for any given general shareholders' meeting are entitled to instruct the Depositary as to the exercise of the voting rights in respect of the shares underlying such holder's ADSs at such meeting. Holders of ADSs maintaining non-certificated positions must follow voting instructions given by their broker or custodian bank.

Appraisal Rights

In the event the Company's shareholders approve:

- the delisting of the shares from all stock exchanges where the shares are listed at that time,
- a merger in which the Company is not the surviving entity (unless the shares or other equity securities of such entity are listed on the New York or London stock exchanges),
- a sale, lease, exchange or other disposition of all or substantially all of the Company's assets,
- an amendment of our articles of association that has the effect of materially changing the Company's corporate purpose,
- the relocation of the Company's domicile outside of the Grand Duchy of Luxembourg, *or*
- amendments to the Company's articles of association that restrict the rights of the Company's shareholders.

Dissenting or absent shareholders have the right to have their shares repurchased by the Company at (i) the average market value of the shares over the 90 calendar days preceding the applicable shareholders' meeting or (ii) in the event that the shares are not traded on a regulated market, the amount that results from applying the proportion of the Company's equity that the shares being sold represent over the Company's net worth as of the date of the applicable shareholders' meeting.

Dissenting or absent shareholders must present their claim within one month following the date of the shareholders' meeting and supply the Company with evidence of their shareholding at the time of such meeting. The Company must (to the extent permitted by applicable laws and regulations and in compliance therewith) repurchase its shares within six months following the date of the shareholders' meeting.

If delisting from one or more, but not all, of the stock exchanges where the shares are listed is approved in the shareholders' meeting, only dissenting or absent shareholders with shares held through participants in the local clearing system for that market or markets can exercise this appraisal right if:

- they held the shares as of the date of the announcement by the Company of its intention to delist or as of the date of publication of the first convening notice for the general shareholders' meeting that approved the delisting; *and*
- they present their claim within one month following the date of the general shareholders' meeting and supply evidence of their shareholding as of the date of the Company's announcement or the publication of the first convening notice to the meeting.

In the event a shareholder exercises its appraisal rights, applicable Luxembourg law provisions shall apply.

Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders, including appraisal rights.

American Depositary Shares

Deutsche Bank Trust Company Americas acts as depositary under the ADSs deposit agreement. As long as the deposit agreement remains in effect, the Company will furnish the Depositary with:

- its annual reports, *and*
- copies of all notices of shareholders' meetings and other reports and communications that are made generally available to the Company's shareholders.

The Depositary will, as provided in the deposit agreement and if requested in writing by the Company, arrange for the mailing of such reports, notices and communications to all record holders of ADSs, on a basis similar to that for holders of shares, or on such other basis as the Company may advise the Depositary may be required by any applicable law or regulation or any requirement of any stock exchange to which the Company may be subject. Any reports and communications, including any proxy solicitation material, shall be furnished in English to the extent such materials are required to be translated into English pursuant to any regulations of the SEC.

Any record holder of ADSs may read the reports, notices, and other communications including any proxy solicitation material at the Depositary's office located at One Columbus Circle, New York, New York 10019.

In addition, such reports, notices and other communications are made available to all shareholders and holders of ADSs on the Company's website at: <https://ir.tenaris.com/investor-relations>

According to the Company's deposit agreement, holders of ADSs may have to pay to the Depositary, either directly or indirectly, fees or charges up to the amounts set forth below:

- A fee of \$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) for: issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; and cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates.
- A fee of \$0.02 (or less) per ADSs for any cash distribution to ADS registered holders, excluding cash dividend.
- Any charges for taxes and other governmental charges that the Depositary or the custodian may be required to pay on any ADS or share underlying an ADS (e.g., share transfer taxes, stamp duty or withholding taxes); and any charges incurred by the Depositary or its agents for servicing the depositary securities.
- Registration or transfer fees for transfer and registration of shares on our share register to or from the name of the Depositary or its agent when you deposit or withdraw shares.
- Expenses of the Depositary for cable, telex and facsimile transmissions (when expressly provided in the deposit agreement) and conversion of foreign currency.
- A fee equivalent to the fee that would be payable if securities distributed to ADS holders had been shares and the shares had been deposited for issuance of ADSs for distribution of securities distributed to holders of deposited securities which are distributed by the Depositary to ADS registered holders.
- As necessary, charges for any costs incurred by the Depositary or its agents for servicing the deposited securities.

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Under the deposit agreement with the Depositary, the Depositary is not liable to holders of ADSs, except that the Depositary agrees to perform its obligations specifically set forth therein without gross negligence and willful misconduct.

Principal subsidiaries

We conduct all our operations through subsidiaries. The following table shows the principal subsidiaries of the Company and its direct and indirect ownership in each subsidiary as of December 31, 2022, 2021 and 2020.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2022	2021	2020
ALGOMA TUBES INC.	Canada	Manufacturing of welded and seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
HYDRIL COMPANY and subsidiaries	USA	Manufacture and marketing of premium connections	100%	100%	100%
IPSCO TUBULARS INC. and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	89%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
SAUDI STEEL PIPE CO.	Saudi Arabia	Manufacturing of welded steel pipes	48%	48%	48%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA INDUSTRIAL Y COMERCIAL and subsidiaries (a)	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPESSOAL LDA.	Portugal	Holding Company	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company, marketing and distribution of steel products	100%	100%	100%
TENARIS INVESTMENTS (NL) B.V. and subsidiaries	Netherlands	Holding company	100%	100%	100%
TENARIS INVESTMENTS S.àr.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS QINGDAO STEEL PIPES LTD.	China	Processing of premium joints, couplings and automotive components	100%	100%	100%
TENARIS TUBOCARIBE LTDA.	Colombia	Manufacturing of welded and seamless steel pipes	100%	100%	100%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris holds 51% of NKK Tubes.

(b) Tenaris holds 98,4% of Tenaris Supply Chain S.A., 40% of Tubular Technical Services Ltd. and Pipe Coaters Nigeria Ltd., 49% of Amaja Tubular Services Limited, 60% of Tenaris Baogang Baotou Steel Pipes Ltd. and until 2021 held 49% of Tubular Services Angola Lda.

CERTIFICATE

I, PAOLO ROCCA, CERTIFY THAT:

1. I have reviewed this annual report on Form 20-F of Tenaris S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; *and*
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; *and*
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; *and*
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2023

/s/ Paolo Rocca

Name:	Paolo Rocca
Title:	Chief Executive Officer

CERTIFICATE

I, ALICIA MÓNDOLO, CERTIFY THAT:

1. I have reviewed this annual report on Form 20-F of Tenaris S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; *and*
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; *and*
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; *and*
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2023

/s/ Alicia Mndolo

Name:	Alicia Mndolo
Title:	Chief Financial Officer

CERTIFICATION**PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002****(SUBSECTIONS (A) AND (B) OF SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE)**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Tenaris S.A. (the "Company"), hereby certifies, to such officer's knowledge, that the Company's Annual Report on Form 20-F for the year ended December 31, 2022 (the "Report"), fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 31, 2023/s/ Paolo RoccaName: Paolo Rocca
Title: Chief Executive Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION**PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002****(SUBSECTIONS (A) AND (B) OF SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE)**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Tenaris S.A. (the "Company"), hereby certifies, to such officer's knowledge, that the Company's Annual Report on Form 20-F for the year ended December 31, 2022 (the "Report"), fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 31, 2023/s/ Alicia M3ndoloName: Alicia M3ndolo
Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

Ratios

Liquid financial assets over total assets

<i>Thousands of U.S. dollars</i>	2022	At December 31, 2021	2020
Cash and cash equivalents	1,091,527	318,127	584,681
Other current investments	438,448	397,849	872,488
Bonds and other fixed income	113,574	312,619	239,422
Liquid financial assets	1,643,549	1,028,595	1,696,591
Total assets	17,550,246	14,449,431	13,716,189
Ratio	0.09	0.07	0.12

Total liabilities to total assets ratio

<i>Thousands of U.S. dollars</i>	2022	At December 31, 2021	2020
Total liabilities	3,515,809	2,343,729	2,269,716
Total assets	17,550,246	14,449,431	13,716,189
Ratio	0.20	0.16	0.17

Current borrowings to total borrowings

<i>Thousands of U.S. dollars</i>	2022	At December 31, 2021	2020
Current borrowings	682,329	219,501	303,268
Total borrowings	728,762	330,933	619,007
Ratio	0.94	0.66	0.49

Alternative performance measures

EBITDA, Earnings before interest, tax, depreciation and amortization

EBITDA provides an analysis of the operating results excluding depreciation and amortization and impairments, as they are non-cash variables which can vary substantially from company to company depending on accounting policies and the accounting value of the assets. EBITDA is an approximation to pre-tax operating cash flow and reflects cash generation before working capital variation. EBITDA is widely used by investors when evaluating businesses (multiples valuation), as well as by rating agencies and creditors to evaluate the level of debt, comparing EBITDA with net debt. EBITDA is calculated in the following manner:

EBITDA = Net income for the period + Income tax charge +/- Equity in Earnings (losses) of non-consolidated companies +/- Financial results + Depreciation and amortization +/- Impairment charge/(reversal)

EBITDA is a non-IFRS alternative performance measure.

<i>Millions of U.S. dollars</i>	For the year ended December 31,		
	2022	2021	2020
Income for continuing operations	2,549	1,053	(642)
Income tax charge	617	189	23
Equity in earnings of non-consolidated companies	(209)	(513)	(109)
Financial results	6	(23)	65
Depreciation and amortization	608	595	679
Impairment charge	77	57	622
EBITDA	3,648	1,359	638

Net cash / (debt) position

This is the net balance of cash and cash equivalents, other current investments and fixed income investments held to maturity less total borrowings. It provides a summary of the financial solvency and liquidity of the company. Net cash / (debt) is widely used by investors and rating agencies and creditors to assess the company's leverage, financial strength, flexibility and risks.

Net cash/ debt is calculated in the following manner:

Net cash= Cash and cash equivalents + Other investments (Current and Non-Current) +/- Derivatives hedging borrowings and investments – Borrowings (Current and Non-Current).

Net cash is a non-IFRS alternative performance measure.

<i>Millions of U.S. dollars</i>	At December 31,		
	2022	2021	2020
Cash and cash equivalents	1,092	318	585
Other current investments	438	398	872
Non-current investments	114	313	239
Derivatives hedging borrowings and investments	6	2	8
Current borrowings	(682)	(220)	(303)
Non-current borrowings	(46)	(111)	(316)
Net cash position	921	700	1,085

Free Cash Flow

Free cash flow is a measure of financial performance, calculated as operating cash flow less capital expenditures. FCF represents the cash that a company is able to generate after spending the money required to maintain or expand its asset base. Free cash flow is calculated in the following manner:

Free cash flow = Net cash (used in) provided by operating activities – Capital expenditures.

Free cash flow is a non-IFRS alternative performance measure. Net cash provided by operating activities for the year 2022 amounted to \$1,167 million.

<i>Millions of U.S. dollars</i>	For the year ended December 31,		
	2022	2021	2020
Net cash provided by operating activities	1,167	119	1,520
Capital expenditures	(378)	(240)	(193)
Free cash flow	789	(120)	1,327