Sustainability Report

2021



Rounding

Certain monetary amounts, percentages and other figures included in this Sustainability 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.

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Chairman's Letter

As I write this letter, the world of energy and steel is going through dramatic disruption, resulting from the geopolitical turmoil caused by the Russian invasion of Ukraine and the accompanying humanitarian crisis in Europe. Tenaris, having concluded a successful 2021, is now confronting this new reality, adapting its supply chain and its industrial and commercial strategy to an unprecedented level of volatility and uncertainty. At the same time, we are making contributions to support the people displaced by the war into the countries and the communities in which we operate.

2021 was a year of recovery from the worst effects of the pandemic in terms of activity and financial results. In 2021, production, sales and margins showed sequential improvements through the year as our markets recovered from the pandemic-induced collapse of 2020. For the year as a whole, our sales rose 27%, while our EBITDA more than doubled, with the margin surpassing its pre-pandemic level.

Our net income also benefited from our participations in Ternium and Usiminas, reaching 16% of our sales. As a result of these annual results and our solid financial position, we are proposing to restore our dividend payment for the 2021 fiscal year to its pre-pandemic level.

This achievement would not have been possible without the structural measures we took in 2020 to improve our profitability over the longer term, as well as the strategic positioning we have built up over the past years in North America and the rest of the world. Nor would it have been possible without the extraordinary resilience and determination of our employees. They have borne the brunt of the impact of the pandemic in their working environment and on their families over the last two years, while adjusting to rapid changes in industrial production, supply chain and customer requirements. It is a tribute to their professionalism that we were able to maintain the high standards of our safety performance over the past year, even when adding 4,000 shop-floor employees.

The United States, and more generally North America, has been at the center of our recovery, being at the forefront of the increase in demand for our products and services, as well as our industrial reactivation. Production at our Bay City mill has reached full capacity and we have reopened many of the facilities we had to close when the pandemic struck, including the recently-acquired Koppel steel shop, which is supplying steel to our Bay City and Ambridge mills.

With the cost of steel reaching record levels during the year and distributor inventory levels declining to less than four months of consumption, U.S. spot market OCTG prices have reached their highest level since 2008. During this period, we have strengthened our Rig Direct[®] service model by introducing digital integration services and reducing working capital requirements. Today, 80% of items ordered by our U.S. Rig Direct[®] customers are made using our Rig Direct[®] portal to integrate order management processes, and our PipeTracer[®] application is being used to make digital tallies. In Canada, we are making a major investment to integrate our seamless and welded pipe production in Sault Ste. Marie. With this investment, we will expand the range of products we can produce domestically and improve the sustainability of our operations in the country.

The offshore market is also recovering, though at a different pace, and that recovery is mainly taking place in Latin America: Brazil, Guyana and Mexico. In Brazil, we are complementing our traditional supply of large-diameter welded casing to Petrobras with seamless medium-diameter casing and seamless risers. In Guyana, we were recently awarded a 10-year contract to supply the casing requirements, including large-diameter connectors, Dopeless[®] connections and pipe management services, for the largest development in the region.

Onshore markets in Argentina and Colombia have also recovered from their pandemic lows. Recently, in Argentina, the government issued a decree authorizing a project to build a major new gas pipeline from Neuquen to Buenos Aires. This should enable a further expansion of gas production in the Vaca Muerta shale formation and reduce the need for future LNG imports. In the Middle East, the recovery is in an earlier phase, and demand for our products was affected by destocking of excess inventories. We have won important long-term tenders for supply to major consumers in the UAE, where we are introducing our Rig Direct[®] service and increasing local content. Also in Qatar, where we are providing a full range of OCTG and line pipe, and in Kuwait. We expect our sales to this region to recover during 2022.

Our sales of mechanical pipe also recovered during the year. Of particular note is the expansion of our sales of tubular components for airbags, where we are currently completing the expansion of a component facility in China. Autoliv, our main customer in this segment, recently granted us their 2021 best supplier award.

We are progressing on the road map we set out to reduce the carbon emissions intensity of our operations in line with our 2030 target. In February, our Board approved a USD190 million investment project to build a wind farm in Argentina, which will supply close to 50% of the electric energy requirements of our Siderca integrated seamless pipe facilities. This is an important initiative to enhance the sustainability of our operations and secure a source of energy supply in the country. We are also preparing for the energy transition through developing materials and products for low-carbon energy applications. For hydrogen applications, we are actively participating in joint industry working groups to define standards for line pipe, and have developed and tested material chemistries that resist steel embrittlement in high pressure applications.

Over the past year, Tenaris has recovered strongly from the impact of the pandemic on energy markets, while strengthening its global leadership and supporting its customers in a fast-moving environment.

As we shift from one global crisis to another, I would like to thank our employees for their contributions and commitment over the past year, as well as our customers, suppliers and shareholders for their continued support.

Sincerely,

huldhory

Paolo Rocca March 30, 2022

Sustainability in Tenaris

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 and 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 largely focused on serving the oil and gas industry, we also supply pipes and tubular components for non-energy applications and are focused on developing and supplying products and services for low-carbon energy applications such as geothermal wells, waste-to-energy (bio-energy) power plants, hydrogen storage and refueling stations, and carbon capture and sequestration.

Through an integrated global network of manufacturing, R&D and service facilities, and a team of 23,000 employees worldwide, we work with our customers to meet their needs in a timely manner, observing the highest levels of product performance and reliability.

Our core values of safety, health, environment, quality and transparency guide our daily activity. They are clearly reflected in our QHSE policy (www.tenaris.com/en/sustainability/), which, together with our Code of Conduct (www.tenaris.com/en/ sustainability/governance-and-ethics/), is embedded in all aspects of our business processes. This report, now in its eighth edition, reflects how those values translate into concrete indicators of our performance. Its preceding publication, the Health, Safety and Environment (HSE) report, was first published in 2009 presenting information dating back to 2004.

Tenaris is a long-term project that goes back over six decades. Since we opened our first mill on the banks of the Parana River in Campana, Argentina, in the early 1950s, our prime objectives have been to grow together with the communities where we work and live, to give our employees opportunities for professional development, to minimize our environmental footprint, and be a reliable partner for our customers.

Tenaris is a signatory of the United Nations Global Compact, a commitment to translate Ten Principles deriving from the Universal Declaration of Human Rights into daily business activity. Additionally, Tenaris is a member of the worldsteel Sustainable Development Charter; for the past four years, worldsteel has named Tenaris a Sustainability Champion for "leading the way in creating a truly sustainable steel industry and society."

The steel industry is a significant source of carbon emissions worldwide, and has joined efforts to promote transparent reporting and take action on reducing emissions, with Tenaris playing a leading role in these initiatives.

We have integrated climate change risks into our governance and business strategy and established a medium-term target for reducing the carbon intensity of our activities by 2030 as part of a longer-term objective of achieving carbon neutrality in our operations.

We allocate a significant part of our capital investments to improving safety, reducing the environmental impact of our operations, and advancing educational standards and opportunities in our communities, all of which we consider as critical to our long-term sustainability.

Our Health, Safety and Environment, and Quality Management systems are designed according to the latest versions of the ISO 14001, ISO 45001 and ISO 9001 standards. Today, 94% of our production sites are working under management systems certified according to these Health, Safety and Environment standards.



Our reporting, in context

Tenaris is committed to strengthening a corporate culture of integrity, transparency and rational decision-making.

This report has been prepared with reference to the guidelines established by worldsteel, the UN Global Compact, the Global Reporting Initiative (GRI-Core option), the Sustainability Accounting Standards Board (SASB) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Please see the GRI, SASB and TCFD content indices at the end of this report. We have identified, evaluated and prioritized topics that can materially impact our ability to sustainably achieve our objectives in line with these guidelines and our own risk assessment. These indicators were chosen to show the most relevant aspects of our performance in the areas of Economic; Health and Safety; Environment; Innovation and the Value Chain; Human Capital; Community Relations; and Governance, Risk and Compliance.

The topics covered by this report are based on our business strategy and concerns or issues of interest to our stakeholders, and cover our whole value chain, from sourcing, product manufacturing and services delivery, to the end-use of our products.

We consider it relevant to highlight how our actions contribute to achieving the Sustainable Development Goals defined by the UN in 2015, as shown later. This report has been approved by our board of directors on March 30, 2022, and includes the non-financial information required to be disclosed in accordance with applicable Luxembourg law.⁽¹⁾ Certain selected information contained in this report has been reviewed by our external auditors, PwC Société coopérative.

⁽¹⁾ Article 1730-1 of the Luxembourg law of August 10, 1915, on commercial companies, as amended, and Articles 68 and 68bis of the Luxembourg law of December 19, 2002, on the commercial and companies register and on the accounting records and annual accounts of undertakings, as amended.

EU taxonomy

The following information is provided in accordance with Article 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council, supplemented by Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 and Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021.

Tenaris's 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, or OCTG, used in oil and gas drilling operations and line pipe used in the transportation and processing of oil and gas, but also for other industrial applications. Our production processes include the production of steel and its transformation into tubular products.

Business activities included in this segment are largely dependent on the oil and gas industry worldwide, as this industry is a major consumer of steel pipe products. 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 for 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.

We are reporting key performance indicators for operations that qualify as taxonomy-eligible activities. From January 1, 2023, we will be required to report key performance indicators for operations that qualify as taxonomy-aligned activities; the proportion of our operations that qualify as taxonomy-aligned activities may be significantly lower than the proportion of our operations that qualify as taxonomy-eligible.

	Total USD million (a)	Tubes NACE Code C24.20 USD million (b)	Proportion of Taxonomy- eligible economic activities (in %) (c) = (b) / (a)	Proportion of Taxonomy non- eligible economic activities (in %) (d) = 100% - (c)
Turnover	6,521	5,994	92%	8%
СарЕх	240	226	94%	6%
ОрЕх	489	455	93%	7%
Services and fees in Cost of sales (excluding R&D services)	200	183		
Services and fees in SG&A	115	110		
Maintenance expenses in Cost of sales	129	118		
Research & Development	45	44		



Total turnover

In this report, the turnover indicator represents the proportion of our net turnover derived from products or services that are taxonomy-eligible.

The turnover indicator is calculated as follows: (i) numerator: sales derived from the Tubes segment (ii) denominator: total sales as disclosed in the consolidated income statement

For further information on our turnover calculations, please refer to "Accounting policy S Revenue Recognition" in our consolidated financial statements for the year ended December 31, 2021.

Capital expenditures

The capital expenditures (CapEx) indicator represents the proportion of our capital expenditures in an activity that is either already taxonomy-eligible or is part of a credible plan to extend or reach taxonomy alignment. The CapEx indicator is calculated as follows: (i) numerator: capital expenditures for the Tubes segment

(ii) denominator: aggregate capital expenditures disclosed in the consolidated statement of cash flow

Operating expenditures

The operating expenditures (OpEx) indicator represents the proportion of the operating expenditures associated with taxonomy-eligible activities or to the CapEx plan.

The OpEx indicator is calculated as follows: (i) numerator: services and fees + maintenance expenses + research and development expenditures corresponding to the Tubes segment cost of sales and selling, general and administrative expenses. (ii) denominator: services and fees + maintenance expenses + research and development expenditures for the whole company.

For further information on our OpEx calculations, please refer to "Accounting policy T Cost of sales and other selling expenses" in our consolidated financial statements for the year ended December 31, 2021.

Climate Change

To address climate change, Tenaris is taking steps to decarbonize its operations and is developing products and services for use in low-carbon energy applications.

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

We aim 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 our energy requirements.

This medium-term target forms part of a broader objective of decarbonizing our operations and reaching carbon neutrality. The timing will depend on the development of emerging technologies and market and regulatory conditions, including carbon pricing and customer support. To achieve this longer-term objective, we will actively pursue the development of technologies involving the use of hydrogen and carbon capture with partners, such as the initiatives we have announced using hydrogen in our Dalmine steel shop in Italy, and carbon capture and use at our Dalmine power plant.

All our steel is produced in electric arc furnaces where recycled steel scrap is used as the primary source of metallic feedstock. We supplement the use of steel scrap with metallics such as pig iron, direct reduced iron and ferroalloys to meet quality, productivity and material specification requirements. Additionally, we produce our own direct reduced iron for our steel mill in Argentina using natural gas, where the availability of steel scrap is limited.

Steel production in electric arc furnaces using a high proportion of scrap in the metallic charge usually has substantially lower carbon emissions than steel produced using iron ore and metallurgical coal as the primary feedstock.

Achieving progress

Over the past year, we have made good progress towards our mid-term objective. By focusing on energy efficiency and reducing the proportion of pig iron used in our electric furnaces, the average carbon emissions intensity of our tubular operations has declined to 1.2 tons of CO_2 per ton of steel processed, which compares with the 1.4 tons of CO_2 per ton of steel processed in 2018 and 1.3 tons of CO_2 per ton of steel processed in 2020. These figures employ worldsteel methodology using local emissions factors for purchased electricity.

Most of the reduction in emissions intensity we have achieved to-date has been in Scope 3 emissions by increasing the amount of scrap used and energy efficiency.

Currently, we are focusing on reducing the intensity of our Scope 2 emissions by increasing the use of renewable energy at a number of our facilities around the world.



In this respect, our Board of Directors recently approved an investment project to build a wind farm in Argentina at a cost of USD 190 million. The project would reduce our CO_2 emissions in this country by some 150,000 tons per year, and supply close to 50% of the electricity requirements at our Siderca integrated seamless pipe mill.

The wind farm, which is expected to be completed during 2023, will be located in an area with a highly favorable capacity utilization factor of 58%. This should lead to a reasonable return on the investment even when considering current Argentine wholesale energy market prices. To accelerate the fulfilment of our targets, we have implemented an internal carbon price at a minimum of USD 80/ton for evaluating investments, and more generally in our operations.

The development and implementation of our climate change strategy is reviewed by our Board of Directors on a quarterly basis. The Board has nominated our Vice-Chairman, Germán Curá, to take particular responsibility for this and to keep it informed of the progress made.

We are also strengthening our disclosure of climate change-related information. In 2021, we joined the Carbon Disclosure Project (CDP), where we received a B rating regarding our management of climate change in 2020.



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Members of the charter are committed to a vision where steel is valued as a vital material for a sustainable world, taking leadership to generate positive impacts on people, the planet and the prosperity of society.⁹⁹



2022 worldsteel Sustainability Charter

A long-term strategy

As we pursue our long-term strategy of achieving carbon neutrality in our operations, we are exploring a range of possibilities with different partners from around the world. We know that there is no single solution, as certain alternatives are better suited to specific sites or regions depending on local infrastructure, resources, technologies and conditions.

We do so with the vision that, as a leader in our industry, we must be competitive in offering our customers low-carbon products and that we have a responsibility to contribute to the development of the technologies that will make this happen.

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. We refer particularly to scenarios which are consistent with the goals of the Paris Agreement, and those focused on the pace 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.

Energy transition opportunities

As suppliers of tubular products and services to the energy industry, the energy transition 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 are increasing our investments in R&D and our organizational focus in these areas, which are expected to contribute a significant revenue stream to the company going forward.

We have developed a range of materials 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.

Stakeholder Engagement & Materiality Analysis

Stakeholder Engagement

In 2021, we continued to track the way in which our stakeholders prioritize ESG issues through ongoing involvement and dialogue, taking the interests of our workforce, customers, investors and trade associations into account to determine the material factors considered in this sustainability report.

Employees

Our people are the foundations of our company's success, and thus attracting, developing and retaining the talent we need is a top priority. The backdrop of shifting workplace values as new hybrid working practices become the norm presents fresh challenges for engaging with our present and future talent.

To keep pace with these changes, we emphasize dialogue and exchange between managers and their teams through quarterly feedback check-ins, periodic Town Halls, Employee Opinion and Pulse Surveys, and performance reviews to address concerns and doubts. In 2021, our CEO broadcast four Live Talks followed by Q&A sessions where employees from around the world were invited to ask any questions they wanted, getting feedback from the audience at the same time.

Customers

We pursue active dialogue with our customers to understand their needs and priorities, and have formed long-term partnerships with many, leading to opportunities for supply chain, technological and digital integration. Our customers regularly discuss with us the challenges and difficulties they encounter in the course of their business, fostering new opportunities to invest in technology, research and development, and design and improve our range of products and services. In 2021, some customers asked us to contribute to ESG surveys of their supply chain, as well as provide data about Tenaris's performance for sustainability benchmarking and global disclosure systems such as the Carbon Disclosure Project (CDP) or EcoVadis, among others. This enabled us to ratify key ESG topics of interest.

Suppliers

A key part of our drive to develop increasingly sustainable procurement practices involves inviting our suppliers to help us understand their ESG risks and topics of interest. We work with our suppliers to strengthen our supply chains, sharing know-how through various different training and assistance programs. Through Exiros, our specialized procurement company, whose ownership we share with our sister company Ternium, we receive feedback about the ESG issues of greatest concern to suppliers.

Communities

Engagement with the communities neighboring our operations is focused primarily on the educational sphere, working with students and teachers as well as school authorities, and is based on a constant assessment of needs and results, identified through dialogue and exchange.

Investors

We maintain fluent communication with our shareholders through quarterly conference calls, in-person meetings and quarterly requests for anonymous feedback. These occasions present opportunities for us to exchange information and track trends. Based on the ratings sponsored by investors, such as MSCI, Sustainalytics and S&P, as well as investor feedback in general, we have been able to establish key areas of interest.

Government

We give great importance to the critical role played by government agencies in protecting the environment, the economy and social welfare. We work closely with government officials and regulatory agencies to ensure we comply with applicable laws and regulations. In addition, we exchange information and points of view aimed at articulating actions to benefit all stakeholders.

Industry Associations

As members of several industrial associations, we work alongside our peers in the industry to address common challenges, sharing best practices to create a truly sustainable steel industry and society, as demonstrated in our commitment to sustainable development and the circular economy. We focus on contributing to responsible sourcing, manufacturing practices and integrated supply chain management in efforts to reduce the industry's footprint as a whole. We play an active role in worldsteel, and have taken into consideration its latest materiality assessment as a basis for our analysis, with nine focus areas of relevance to the steel industry and its stakeholders, including climate action, the supply and value chain, circularity and materials management as well as water and air management, human capital, transparency and ethics.

Materiality Analysis

Our definition of material topics has taken into account a combination of internal and external factors, topics which may reasonably be considered to be relevant inasmuch as they reflect our economic, environmental and social impacts, or have an influence on the decisions of our stakeholders.

These factors include Tenaris's own considerations and strategy, concerns expressed by stakeholders, and aspects covered by the different guidelines used to prepare this report: worldsteel, UN Global Compact, GRI, SASB, and TCFD.

Additionally, we also take into account expert investigations and a raft of broader economic, social and environmental interests raised by stakeholders, as well as the ESG risks identified in the risk management roadmap prepared by our Critical Risk Committee.

People

- Workforce health & safe
- Workforce training, development, retention and engagement
- Diversity, inclusion and equal opportunities
- Human rights & freedom of associatio
- Community relations and development

Planet

- Climate change: greenhouse gas emission reduction and energy efficiency
- Environment aspects: air emissions, water and waste management, material efficiency and biodiversity.

Prosperity

- Energy transition: development of low-carbon product portfolio
- Economic performance and distributions
- Innovation
- Customer relationships / satisfaction
- Supply chain sustainability

Governance

- Corporate governance, business ethics and transparency
- Risk management





Our actions for a more sustainable business

Health and Safety

→ Commitment

• To protect our employees, looking after their safety, health and well-being, aiming to achieve zero injuries and occupational illnesses throughout our industrial system

\rightarrow Objectives

- Consolidate a strong health and safetyoriented culture within the Company
- Achieve zero fatalities and a Lost Time Injury Frequency Rate target below 1.0, contractors included
- Ensure that 100% of employees are fully fit for work, contractors included
- Safeguard the health of our people throughout our plants and offices

\rightarrow Actions

- Launch of a comprehensive Health Care plan: annual medical check-ups and gathering statistical health data
- Focus on well-being and self-care Redesign of Working Instructions and ongoing risk analyses
- Safety Leadership Training programs and continuous communication at all levels to increase awareness and foster prevention in context of industrial ramp-up
- Deployment of special Task Forces to tackle risks e.g., Cranes and Vehicles
- Recognition of excellence in safety performance at sites and in Safe Hour meetings

Environment

→ Commitment

 To reduce our environmental footprint and contribute to global and regional goals addressing climate change risks

\rightarrow Objectives

- Reduce the CO₂ emissions intensity of our operations by 30% from 2018 levels by 2030
- Minimize particulate and other emissions at our sites
- Foster the circular economy by maximizing scrap recycling and minimizing waste to landfill
- Ensure responsible water management

\rightarrow Actions

- Advancing with the implementation of energy efficiency projects
- Continuing with the implementation of the strategy to reduce CO₂ emissions
- Continuing with investments and plans to improve emissions control, material efficiency, waste and water management

Innovation and Supply Chain

→ Commitment

• To develop integrated product and service solutions that meet customer requirements while enhancing safety, efficiency and reliability, and minimizing environmental impact through the supply chain

\rightarrow Objectives

- Develop products and services to match evolving customer needs and enter new markets
- Promote supply chain efficiency through process simplification, digital integration and minimization of waste
- Develop reliable and competitive value chains in the countries where we operate

\rightarrow Actions

- Rig Direct[®] service model enhanced with digital integration initiatives
- Development of THera™ propietary materials technology for hydrogen applications
- Digital integration, automation and Artificial Intelligence (AI) initiatives to enhance production management and improve quality, processes and lead times
- Combining Dopeless[®] and PipeTracer[®] technologies to improve customer operational efficiency while reducing environmental impact and the risk of accidents

SUSTAINABLE DEVELOPMENT G ALS



Tenaris supports the United Nations Sustainable Development Goals

Human Capital

→ Commitment

 To lead with care, providing a safe, flexible working environment built upon well-being, accountability, inclusion and trust, to enable employees to develop their skills and careers while contributing to the company's goals

→ Objectives

- Foster trust and empower employees to promote change
- Embed sustainability values through transparent and effective processes
- Respect and promote diversity and inclusion in all forms

→ Actions

- New Way of Working strategy embracing flexibility for hybrid work and learning
- Pilot project for office layout to foster teamwork and in-person interaction
- Training people to adapt to change and new health and safety protocols through enhanced online communications
- Engagement surveys for shop-floor personnel
- Recruitment drive to meet rise in demand and production

Community Relations

\rightarrow Commitment

• To drive inclusive growth and development in the communities where we work and live, and support them during crisis

\rightarrow Objectives

- Contribute to improving all levels of education, particularly technical
- Help preserve our communities' well-being, identity and heritage, supporting healthcare, and fostering creativity through cultural exchange and integration through voluntary work

\rightarrow Actions

- Adapted and expanded education and cultural programs to an online environment
- Strengthened educational programs, offering extra support to students who need it
- Process to certify Argentine Roberto Rocca Technical School (ETRR, in Spanish), as a community technical training center
- Developed remote teaching system for learning continuity, including Industry 4.0 skills

Governance, Risk and Compliance

→ Commitment

• To build a corporate culture of transparency and integrity based on ethical behavior and compliance with the law

\rightarrow Objectives

 Develop and oversee the company's strategy and management of risk, taking into account financial, social, environmental and ethical considerations and the long-term sustainability of the company

\rightarrow Actions

- Board oversees implementation and development of strategy for climate change through quarterly board discussions scheduled on this subject
- CEO variable compensation linked to financial and non-financial indicators

Global Organization



SALES BY MARKET



TOP CUSTOMERS

ExxonMobil	Oatar Petroleum
LANOTHVIODII	Quitar i ctroicuin
Оху	Saudi Aramco
Pan American	Shell
Energy	Tap Rock
Pemex	Resources
Petrobras	Tecpetrol
Pioneer	Tourmaline Oil
Natural	Corporation
Resources	YPF
	 ExxonMobil Oxy Pan American Energy Pemex Petrobras Pioneer Natural Resources

SERVICE AND DISTRIBUTION NETWORK IN

COUNTRIES

At December 31, 2021





Economic Overview

We report on our operational and financial performance in the rest of our annual report (https://ir.tenaris. com/financial-and-sustainability-reports/reports). Here, we include our main financial indicators and the distribution of economic value generated.

In 2021, our results recovered strongly from the worst effects of the pandemic, bolstered by the uptick in oil and gas drilling activity in the Americas, and the structural measures taken to improve our profitability over the longer term.

Our sales rose by 27% year-on-year, while our EBITDA more than doubled, with the margin surpassing prepandemic levels due to increased average selling prices. The increase in raw materials and energy costs was contained by an improved industrial performance and the higher absorption of fixed costs.

At net income level, our results benefited from an extraordinary contribution from our equity participations in Ternium and Usiminas, reflecting record prices in the flat steel sector, contrasting with 2020, which was impacted by the USD 622 million impairment charges on the carrying value of goodwill and other assets in the United States.

Operating cash flow for the year amounted to USD 119 million in 2021, compared to USD 1.5 billion in 2020, due to a working capital build of USD 1.0 billion.

	2019	2020	202
In USD millions (except otherwise stated)			
Net sales	7,294	5,147	6,52
Operating income (loss)	832	(663)	70
EBITDA	1,372	638	1,35
EBITDA margin - %	19%	12%	219
Net income attributable to owners of the parent	743	(634)	1,10
Equity attributable to owners of the parent	11,989	11,263	11,96
Cash flow from operations	1,528	1,520	11
Capital expenditures	350	193	24
Research and development expenditures	61	42	4
Dividends	153	248	48
Net financial position	980	1,085	70
Return on equity - %	6%	-5%	9%
Return on capital employed - %	7%	-6%	79
FCF Margin - % of net sales	16%	26%	-29

Financial indicators



This was driven by the ramp-up in activity. Although in absolute amounts, working capital build in 2021 was similar to the corresponding reduction in 2020, it is lower in terms of days of sales, and includes higher raw material and energy costs embedded in inventories.

After capital expenditures of USD 240 million and dividend payments of USD 319 million throughout the year, our net cash position declined to USD 700 million (USD 1.0 billion of liquid assets less USD 0.3 billion of debt) at the end of the year.

The Company's board of directors proposes, for the approval of the annual general shareholders' meeting to be held on May 3, 2022, payment of an annual dividend of USD 0.41 per share (USD 0.82 per ADS), or approximately USD 484 million, which includes the interim dividend of USD 0.13 per share (USD 0.26 per ADS), or approximately USD 153 million, paid on November 24, 2021. If the annual dividend is approved by the shareholders, a dividend of USD 0.28 per share (USD 0.56 per ADS), or approximately USD 331 million, will be paid on May 25, 2022, with an ex-dividend date of May 23, 2022 and recording date of May 24, 2022.





Health and Safety

\rightarrow Our commitment

To protect our employees, looking after their safety, health and well-being, aiming to achieve zero injuries and occupational illnesses throughout our industrial system.

\rightarrow Our objectives

- Consolidate a strong health and safety-oriented culture within the Company
- Achieve zero fatalities and a Lost Time Injury Frequency Rate target below 1.0, contractors included
- Ensure that 100% of employees are fully fit for work, contractors included
- Safeguard the health and safety of our people throughout our sites and offices

\rightarrow Our actions

Our core values of safety, health, well-being and care for the environment are embedded in our mission to achieve sustainable quality and transparency throughout our daily activities. In 2021, approved capital expenditure projects in the area of health, safety and environment accounted for about 15% of the total of the Company's approved projects.

As part of the Company's Industrial Transformation Plan, we have prioritized risk reduction, improving working conditions in terms of indoor air quality and ergonomics, and also reducing our overall environmental footprint.

Tenaris deployed a comprehensive health and safety plan to manage its response to the coronavirus outbreak around the world, including a vaccination awareness campaign for all employees throughout sites and offices.

In the last three years, we have had no fatal accidents.

58%

REDUCTION IN LOST TIME INJURY FREQUENCY RATE COMPARED WITH 2017

USD

MILLION INVESTED IN HEALTH AND SAFET' IN 2021

43,000 SAFE HOURS HELD IN 2021

7,000 EMPLOYEES RECEIVE WEEKLY SAFETY UPDATES

"

When everybody works with discipline and consistency, we can prevent incidents and accidents, so the challenges are to continue working on improving safety standards to reach the ultimate goal of zero accidents.⁹⁹



Antonio Caprera Chief Industrial Officer

Essential values for our future

The safety and well-being of our employees is our top priority, essential to our success and continuity as a sustainable organization over time, and intrinsic to the relationships we develop with our communities of neighbors, suppliers, customers, and investors. As stated in our Quality, Health, Safety and Environment Policy (www.tenaris.com/qhse), Tenaris is oriented towards protecting its employees by creating and sustaining a safety culture capable of safeguarding their well-being and delivering zero accidents.

We believe that it is our duty to provide for a safe and healthy work environment for all of our employees in our offices and plants around the world, on the understanding that all work-related injuries and illnesses can and must be prevented.

We are constantly innovating and implementing initiatives to raise awareness and ensure full compliance with our procedures, standardizing practices and technologies in order to minimize exposure to health and safety risks.

New protocols and procedures

At the outset of the pandemic, we moved swiftly to introduce a series of protocols designed to safeguard the health and well-being of our employees, whether in the mills performing essential tasks or working from home. These procedures were adapted in line with developments and national regulations, and were made standard practice throughout our facilities. Early last year, as the situation developed, we launched a widespread vaccination awareness campaign for employees, as well as their families and people from our local communities, which we continue to actively promote throughout our operations. The importance of the vaccine awareness campaign cannot be understated as part of the move to help Tenaris become a safer working environment and in addition protect the community at large. With due regard for applicable privacy laws, Tenaris keeps an updated record of vaccination rates.

SaudiSteelPipe was the first Tenaris facility to reach a 100% COVID-19 vaccination rate, as we were able to offer employees access to the vaccine by working in collaboration with MODON, the Saudi Authority for Industrial Cities and Technology Zones. Campaigns were launched on different platforms to offer support to the community and raise awareness to protect employees and their families.

In good health

Tenaris's comprehensive occupational health program enshrines the company's commitment to providing a healthy workplace—whether in the office, mill or at home when remote working—using innovative technology and equipment to ensure people's quality of life, health and personal well-being. We perform risk analyses to evaluate and control a range of activity-related factors with the potential to affect employee health, including chemical, biological, physical, ergonomic and psychological risks.



The Health Care Project

Part of the new strategy envisaging the return to the workplace was the development of an ambitious, far-sighted program called the Health Care Project, launched at the beginning of 2021, which tackles the issue of being fit for work at many levels.

Our objective is to ensure our population is in as good health as possible, encouraging each person to take responsibility for their own physical and mental well-being, not only for their own quality of life but also for the quality of their work at the company.

This is a two-pronged approach which in the short term seeks to raise people's awareness of their own health, enabling them to take preventive action if necessary, and also aims to help the company know its people better.

The long-term goal is to enable Tenaris to take action to improve certain issues common to a certain majority, such as statistically common problems. The Health and Safety department developed a new Health protocol in line with global best practices, and worked with the Group's Research Hospital Humanitas to identify the most relevant physical examinations required for each person, which will also enable key pathologies to be detected.

The idea is to offer all employees the benefit of a complete medical check-up every year.

Exams are segmented according to the position, occupation and risk level of each person.

MEDICAL EXAMINATIONS IN 2021 **190,000** vs. **70,000** in 2020

PERIODICAL MEDICAL VISITS IN 2021 **10,000** vs. **5,000** in 2020

"

Recent experience has shown us the importance of expanding our approach to health and safety, and we are now taking measures that go further than just safety in the workplace, to ensure that people are both physically and mentally fit and well.⁹⁹



Riccardo Dovera Corporate Health & Safety Senior Director

One of the key aspects of this project in the long-term is to collect statistical data at aggregate level, anonymously (preserving our employees' confidentiality and with due respect for applicable privacy laws), and subsequently process it to evaluate the potential impact of health on the company's different areas, bearing out the adage "Healthy people, healthy company." The project envisages a dedicated investment in IT to completely overhaul the company's health module and related data management, which will in turn enable the design of specific actions as part of a global or regional protocol of health procedures, as companies with strong health and wellness programs tend to outperform others in economic terms.

ENCOURAGING WELL-BEING

Following changes in working habits, and as a central element of its New Way of Working, the company is taking a more integrated approach to people's health, including well-being and mental health, to support employees and prevent stress and burnout. Managers received training in socio-emotional skills and mental health issues to be able to support their team members. This was particularly important when it came to providing remote support to those working from home, and learning to evaluate their concerns. Digital communications campaigns, flyers and posters, were deployed in our offices and plants around the world to promote self-care, offering tips and advice as well as enhancing the social aspect of work relationships, encouraging people to speak up about mental health and well-being issues at team level.









Safety first

In 2021, the Company continued with its Industrial Transformation Plan, whose results demonstrated that the direction taken by the original strategy was correct. In fact, our Safety Performance has significantly improved over the last three years, thanks to the proper planning of Tenaris core initiatives in this area. The strategy focuses on establishing a resilient safety culture around people's behavior, requiring the hands-on involvement of leaders at all levels, as a strong safety performance engaging workers is only sustainable if driven by management.

Shift leaders: setting an example

Putting safety at the heart of industrial growth and transformation has meant investing efforts in training and communications. We are especially targeting shift leaders through advanced training programs because we believe their role is essential on the shop floor, as they are in a position to transfer knowledge to shop-floor employees and set an example of correct behaviors. A Safety Leadership course was held throughout the year for almost 500 shift leaders, to improve risk management and awareness. Over the last three years, some 60,000 hours of specific training have been provided to this population, positively impacting safety indicators.

During 2021, we were able to reduce our lost time injury frequency rate to 1.0, despite incorporating 4,000 new shop-floor employees throughout the company from October 2020 to the end of 2021. In the area of communications, we have rolled out several safety initiatives to improve awareness of conditions and practices throughout our operations, as most incidents and accidents are the result of unsafe behavior when executing work-related tasks. These include specific campaigns on how to use certain tools that have helped to reduce injuries related to manual tasks, as well as structured face-to-face communications processes designed to reach employees at all levels and improve safety behaviors.

We are using the information recorded in the IT system to track accidents, incidents, unsafe conditions and behaviors as input for company-wide communications campaigns, such as the weekly mailing of infographics about specific incidents, translated into ten languages, to 7,000 employees around the world.

Redesigning procedures

Our new safety approach continues with the redesign of the Working Instructions detailing the steps making up each task undertaken at the mill. We continuously review our risk analyses all over the world, increasing operator involvement and adding new features such as critical element checklists. We have also targeted initiatives regarding high impact areas, where we have upgraded steel shop exhaust systems and revamped overhead cranes.

We are firmly committed to achieving a reduction in the occurrence of high-severity incidents, including the deployment of cross-site actions plans following relevant events and a comprehensive preventive program aimed at leveraging the hierarchy of risk controls. The most severe hazards are those involved in handling materials, the use of overhead cranes and heavy machinery, as well as work at height. Our series of safety objectives and targets are supported by detailed plans for implementation at each of our sites.

The program breaks down the hazard and risks specific to each sector and establishes special teams, such as the Crane Task Force, or the Vehicle Task Force, giving them a remit to define the appropriate preventive safety procedures for their area. These include minimum safety requirements, pre-use checklists, preventive maintenance routines, shift checklists and an employee certification program, as well as general training and communications activities to improve safety awareness overall.

Additionally, as regards vehicle use, we are investing in improving traffic flow and management on our premises to improve the segregation of people and vehicles.

New processes have also been introduced to manage the risks arising from interferences in manufacturing and logistics processes.

We actively take part in benchmarking activities with other industrial companies, and have been recognized on several occasions for groundbreaking safety-oriented initiatives and concrete results by worldsteel.



Leaders in prevention

During 2021, we launched a global initiative to recognize the efforts made at our sites around the world to achieve excellence in health and safety.

Inspired by worldsteel's awards program for HSE excellence at corporate level, Tenaris is developing its own program to recognize the safety initiatives developed by each site, taking into account innovation and contributions to occupational health and safety that can serve the industry as a whole.

As part of the Recognition Initiatives scheme, which includes Supervisor Awards for leaders in prevention, we are revamping our shop-floor Safe Hour proceedings to encourage positive observations.

The thrust of these meetings is now oriented towards singling out excellence in safety behaviors among workers in order to balance the approach to corrective observations, as part of our company-wide HSE culture.

Contractor safety

We include all contractors working at our sites in the Tenaris Safety Management System to ensure our prevention programs are truly effective. In 2021, we continued to strengthen our Contractor Management Process by holding structured evaluations of HSE performance and checking that the process of sharing HSE requirements, including our Process Safety Management program, with Contractors is managed smoothly and comprehensively. As members of worldsteel's safety groups, we work with other leading steel producing companies to share information and constantly enhance our guidelines for safety management in several different areas.

Our Process Safety Management program is an area where we are constantly keeping pace with the latest developments in safety, looking at ways of introducing improvements in a range of sectors. These include design and engineering at facilities, equipment maintenance, ensuring effective alarms and control points, and reinforcing procedures and training to create a disciplined approach to personnel certification.

This program dovetails with our catastrophic risk analysis and crisis management procedures, as well as others aimed at detecting, preventing and remediating unexpected events with a serious impact on our people, the environment and our business continuity.



Key indicators







Safety




Environment

\rightarrow Our commitment

To reduce our environmental footprint within our communities and value chain; working with partners and peers to address the climate change challenge and transition to a carbon neutral economy.

Steel is an essential material for our daily lives, used everywhere and for a variety of products, yet steelmaking is a highly energy-intensive process and produces significant quantities of different emissions including carbon dioxide. The physical, social and financial risks of climate change, and the global challenge of reducing greenhouse gas emissions, are driving steel industry leaders to find new solutions for reducing their footprint by turning to a low carbon economy.

New technologies and practices offer economic and environmental benefits, from materials recycling as part of the circular economy, to harnessing cleaner energy. Achieving greater efficiency, increasing scrap recycling and employing natural gas as a bridge fuel on the way to renewables, requires an ongoing industry commitment to working together. However, these alternatives are not necessarily effective or viable in all processes and regions, as there are many variables with an influence on the implementation.

As an industry leader, Tenaris believes that its responsibility to reduce the environmental impact of its activity is also an opportunity to embrace innovation and technological change, engaging its partners in the value chain. Tenaris has pledged to achieve a 30% reduction in its CO_2 emissions intensity rate by 2030 considering Scopes 1, 2, and 3 related to raw materials use, compared with 2018 levels. This medium-term target forms part of a broader long-term objective of achieving carbon neutrality.

30%

BY 2030 INTENSITY REDUCTION TARGET IN CO, TN / TN STEEL

14%

REDUCTION IN TN CO₂ / TN STEEL VS 2018 BASELINE

78% RECYCLING CONTENT IN OUR STEEL

99.0% MATERIAL EFFICIENCY AT STEELMAKING "

The recent announcement of our wind farm project in Argentina, set to supply nearly 50% of Siderca's electricity demand, is a milestone on our decarbonization roadmap.⁹⁹



Carolina Bengochea Global Environmental Director

Energy and climate action

\rightarrow Our commitment

To reduce the intensity and overall level of our CO₂ emissions by using energy resources efficiently, increasing the use of scrap and implementing the best technologies available, evaluating the best options on a case-by-case basis.

\rightarrow Our objectives

- Increase the efficiency of energy use
- Reduce the intensity of CO₂ emissions by implementing actions ranging from increasing scrap use and clean electricity to the use of hydrogen and carbon capture, as well as implementing the best technologies available to achieve greater efficiency
- Provide our customers with products and services which contribute to minimizing emissions levels
- Engage with our suppliers to promote the production and use of more sustainable products, services and operations

\rightarrow Our actions

World steel production accounts for around 8% of greenhouse gas emissions stemming from the use of fossil fuels, making the reduction of CO₂ emissions an urgent priority. Aware of how steel contributes to global CO₂ levels, but also its essential role in building the infrastructure of today's world, Tenaris is committed to reducing emissions and achieving greater energy and material efficiency throughout its operations. A focal area is the increase of scrap use in steelmaking processes, and implementing alternatives to cut emissions by employing innovative technologies at our sites.

Most of our steel is based on recycled steel, currently the technology producing the lowest emissions for steel production. We have one natural gas-based iron-making direct reduction plant in Argentina.

Since we do not produce steel using coal-based blast furnaces, the emissions intensity of our steel production today is significantly lower than the average for the iron and steel industry. However, we recognize the urgent need to act to reduce emissions and tackle the challenges of climate change.

Our process route means we can reach higher values in the recycling content of our steel. In 2021, our newly-acquired Electric Arc Furnace facility in the U.S., Koppel, began working with high percentages of scrap, as do our Silcotub and Dalmine mills. The percentages of scrap in the mix used in each region depend as much on local availability and scrap quality as on steel quality requirements.

In 2021, we achieved recycling content levels of 78% in our steel, a slightly lower value than in 2020, largely because of scrap availability. In 2020, our production levels were lower than usual because of the pandemic, so we were able to increase our scrap sourcing, particularly in Argentina.

Decarbonization program



Reducing CO₂ emissions: actions taken

We are evaluating numerous initiatives to reduce CO_2 emissions, focusing on our steel production sites in line with general developments in the steel industry. These range from increasing scrap in our steel production, and energy efficiency and recovery projects, to the use of renewable electricity sources for lowering Scope 2 emissions.

Together with our affiliates Tecpetrol, Tenova and Techint Engineering & Construction, we are developing different solutions in this area, drawing on the synergies and capabilities of an integrated team to solve complex problems.

This year we allocated USD 18.6 million to energy efficiency and carbon reduction projects, as part of our larger-scale commitment.

Energy efficiency is one of the pillars of our decarbonization plan and envisages a raft of actions designed to build awareness of the need for energy conservation and a more efficient use of energy sources in daily routines.

Our benchmarking shows that our emissions intensity for Scopes 1, 2 and 3 for raw materials, continues to fall. 2021 saw a reduction of 8% vs. 2020, and an overall reduction of 14% vs. our 2018 baseline. As part of our contribution to a carbon neutral economy, we have just announced an investment of USD 190 million to build a wind farm in the province of Buenos Aires, to supply nearly half of our Siderca mill's electricity demand. We are also evaluating projects for renewable electricity generation in Colombia, Italy, Mexico, Romania, and the U.S. This complements our initiatives to promote green hydrogen use in Dalmine and the recently-signed MOU with Saipem and Siad to evaluate a carbon capture and use project for the Dalmine power plant.

The use of alternative raw materials is a way of contributing to decarbonization and the circular economy at the same time. Our Silcotub site is working with an EU-financed project testing different materials to replace coal, while Dalmine is evaluating the use of a reducing electric arc furnace to produce pig iron internally from rolling mill scale and waste plastics.

Our commitment to cleaner energy and production processes involves several projects at different stages of development, targeting our three scopes of emissions, and taking into account the best fit for each site.



Environmental Product Declaration

During the last months of 2020, we finalized two new Environmental Product Declarations (EPDs), one for seamless large vessels from our Dalmine site, and the other for Carbon & Alloy Seamless Tubes & Pipes for Power Generation Applications produced at Dalmine and Silcotub. The EPDs are part of our ongoing efforts to disclose environmental data from our products in standardized form and join those issued for structural pipes from Dalmine and Tamsa; for Dalmine line pipe solutions; and for our OCTG seamless pipes from Siderca, Dalmine, Silcotub and Tamsa, currently under review.

Our EPDs show that over 60% of the company's GHG emissions are from upstream processes, and 30% from pipe manufacturing, while transport only has a limited impact on the overall total. This information serves to steer our main actions towards improving the consumption and type of raw materials we use, as part of our drive to achieve efficiency throughout the steelmaking process.

Efficiency in the Value Chain

The Rig Direct[®] service model was developed not only to help customers save time and costs by reducing on-site inventories and synchronizing supply chain services, but also to reduce the levels of CO₂ generated, as less material is produced, transported and handled. Our experts in pipe materials and performance, materials supply and inventory management, work closely with our customers to maximize operational safety and minimize environmental impact by optimizing the use and service life of materials. This contributes to more efficient drilling operations in terms of cost, time and environmental footprint.

Air quality

\rightarrow Our commitment

To minimize emissions, contributing to good air quality in our operations and in the communities where we operate.

\rightarrow Our objectives

- Comply with local and internal emissions requirements, monitoring activities to measure performance
- Eliminate fugitive emissions from steelmaking processes
- Reduce VOC emissions related to our coating activities
- Minimize air pollutants in different processes

\rightarrow Our actions

In addition to CO₂ emissions, the steelmaking process creates emissions from particulate matter and other pollutants inimical to air quality and public health. Our corporate procedures set strict limits on stack emissions and monitoring requirements, while internal limits have been defined according to the best technologies available, improving processes beyond local legal compliance levels, as not all countries where we produce have similar requirements.

Reducing emissions

We have increased investments in particulate emissions control to upgrade systems and achieve target emissions levels according to the highest standards and best technologies available at our Tamsa and Siderca steel shops. The second phase of our project in Argentina faced delays due to the pandemic, and will be reviewed in 2022 as part of the major changes planned for our steel shop. In 2021, operations resumed at Koppel, our Pennsylvania site, where an engineering project is under development to improve the efficiency of the fume capture and treatment system, expected to start in 2023.

We continuously monitor particulate material levels in our steel shop stacks as the main air quality pollutant from the steel process, enabling our maintenance areas to keep the bag houses operating properly, ensuring healthy working conditions and cleaner air for our employees and neighboring communities.

Nitrogen oxide (NOx) emissions are related to the steelmaking process, principally to natural gas combustion in different processes. We have incorporated low NOx burners in our new or revamped furnaces to reduce emissions, and in Bay City, we implemented a selective catalytic reduction process to further lower emissions.

Another key air-pollutant reduction program envisages the gradual conversion to water-based varnish or UV coating to reduce our volatile organic compounds (VOC) emissions from coating processes. In 2019, two solvent-based lines in Argentina were changed to water-based products, while Tamsa is revamping two lines in stages, starting with the improvement of the capture system and preparation for the second step of the project, when it will move to water-based.

Bay City is operating a thermal oxidizer for its water-based varnishing line after a USD 1.2 million investment to reduce VOC.

The revamped lines for Dopeless[®] products for pipes and couplings at Siderca have been fitted with a scrubber abatement system and a post-combustion chamber for couplings to reduce VOC content.

Circularity and material efficiency

\rightarrow Our commitment

To implement circular economy concepts throughout our industrial system.

\rightarrow Our objectives

- Maximize recycling rates at our facilities
- Maximize scrap availability and use
- Reduce the amount of materials sent to landfill by recycling, reusing and revalorization

\rightarrow Our actions

As a permanent resource, steel is fundamental to achieving a circular economy: it can be recycled infinitely without losing any of its properties, a way of saving iron, energy, coal and other materials, producing less CO_2 emissions, and preventing useful material from ending up in landfill as waste.

Recycling scrap

Our life-cycle approach to scrap recycling helps minimize the environmental footprint of our operations, also a key opportunity for the steel industry to reduce CO₂ emissions, based on current technology. Scrap can be made into new steel as closed material loop recycling, avoiding primary steel production. We trust that governments in the countries where we operate will recognize this and allow steel scrap recycling to occur efficiently, avoiding its classification as a waste stream.

As a whole, steel produced at our Dalmine, Koppel, Siderca, Silcotub and Tamsa facilities had a average recycled content of 78% in 2021, calculated according to ISO 14021 standards, thanks to the use of electric arc furnaces (EAF) and scrap recycling.

Recycled content value is a weighted average taken for the five sites, based on steel bar production, with the highest values being achieved by our European sites Dalmine and Silcotub, and now also by Koppel in the United States.

Over the last year, Tamsa has increased its recycling content by using more scrap as well as by reducing the amount of pig iron and hot briquetted iron, leading to a decrease in the site's CO, emissions by almost 20%.

Our Siderca mill in Argentina combines locallysourced steel scrap with direct reduced iron produced on site, using natural gas to provide the metal charge necessary for operations. Any differences in processes and raw materials arise from local availability and scrap market conditions.

During 2021, we recycled nearly 2,900,000 tons of recycled steel scrap at our plants to produce new, high-quality steel.



Recycling

2,900,000 TONS OF SCRAP recycled to produce new steel

20,000 TONS OF IRON based products from DRI plant 117,000 TONS OF SCALE recycled

380,000 TONS OF SLAG recycled

RECYCLING CONTENT IN OUR STEEL



Material management

Our level of material efficiency reached 99.0% in 2021 for our steel sites, which compares with a steel industry average of 97.9% reported by worldsteel for 2020.

When considering all our production sites, we reuse and recycle residue and by-products to cut waste: during 2021, we sent 6.5% of all residues produced to landfill, continuing a downwards trend, and co-product recycling resumed the usual rates achieved in previous years.

Slag, the major waste co-product, is reused and recycled in a number of areas such as building materials, fillers, road surfacing, and concrete; while scale, the second co-product, is mainly used in cement processing or by other steel companies.

Our steel mill in Romania is part of Retrofeed, a European-funded project testing different materials used in the steelmaking process to enhance circularity. This includes reusing materials which can be a source of energy, replace coal, and thus contribute to improving the carbon footprint. As part of the project, Tenaris has commissioned an injection system to test the addition of different materials to the mix, such as plastics, tires and internal sludges.

This project will continue for the next three years with a range of different partners as we jointly investigate ways of developing work with the EAF to achieve circular, low-emission steel. Our Confab welding site in Brazil reuses or recycles most of the waste it produces, including scale, wood, and other residues from the welding process.

This was a result of a local effort where our environment team coordinated a series of employee training and awareness campaigns in addition to investigating alternatives and developing new opportunities for site residues. Overall, the plant's recycling rate rose from 56% to 90% last year.

At Tamsa, our largest steel and pipe-producing mill based in Veracruz, Mexico, we are already reusing or recycling over 90% of waste, thanks to several initiatives that have been ongoing for a number of years.

The most recent campaign targeted the management of residues from scrap shredder activities, as this can produce significant amounts of waste, depending on scrap quality and origin. Efforts were made to recover and repurpose non-valuable ferrous and non-ferrous materials, significantly reducing waste generation thanks to coordinated actions involving local suppliers and customers.

We continuously work to develop Reduce, Recycle, Reuse (3R) initiatives with our employees, focusing on reducing single-use plastics or using biodegradable materials instead of plastics, as well as maintaining thread protectors by recycling, thus increasing opportunities for circularity in our industry.

LESS PLASTIC FOR A CLEANER ENVIRONMENT

As part of its commitment to reducing the environmental impact of its activity, enshrined in the UN's Sustainable Development Goal 12, on responsible consumption and production, Tenaris regularly deploys Reduce, Recycle and Reuse campaigns for its employees at both offices and worksites.

One initiative is a bottle-meter introduced in the dining hall at the Siderca mill in Campana to raise awareness of the amount of single-use plastic discarded everyday, and collect used PET-plastic water bottles for recycling.

Based on the premise that every action, no matter how small, has an impact on preventing

or reducing waste, the idea is to encourage people to opt for reusable water bottles which the company also distributes.

In addition, the company is donating the equivalent of the recycled PET in monetary terms to the Fundación Banco de Bosques, a native forest preservation initiative.

One of the knock-on effects of this campaign is the positive messages and photos shared by employees on their social networks, helping to change attitudes and awareness among both internal and external stakeholders.





Water management

\rightarrow Our commitment

To ensure the responsible management of water.

\rightarrow Our objectives

- Minimize water intake in water-scarce areas where we have water-intensive operations
- Meet water discharge quality targets
- Implement the best water management technologies for new lines

\rightarrow Our actions

Water plays a major role in steel manufacturing processes, although little of it is consumed, as most is reused or returned to source. Tenaris is aware of its responsibility for managing water resources, probably the leading challenge for sustainability after climate change and air quality, and is constantly evaluating how best to conserve and reuse water.

In 2021, 73% of the water we used was sourced from surface water and 22% from subsurface, with the remainder from local networks.

At Siderca in Argentina, over 90% of our intake comes from surface water, as the site was specifically designed to work off an open water circuit on the shores of the Parana River. The Siderca rolling mill invested in a new water recycling and treatment circuit at the end of 2018, leading to an overall 25% reduction in surface water intake, and we continue to invest in upgrading water management systems. Although water withdrawal is a relevant and challenging issue for the steel industry, especially when sites are located in areas with high consumption completion or low availability, the quality of the water discharged is no less relevant.

The quality of our effluents discharge is regularly monitored to ensure compliance with local and internally-mandated standards, and we have implemented different treatments according to the type of effluent and its destination. Most are physical chemical treatments comprising secondary treatments for internal sewage waste water systems, deployed when there is no appropriate infrastructure in the location where we operate.

Improving water use and management

We have evaluated water stress levels where we have operations, focusing efforts on facilities requiring high water-use rates for steel seamless pipe making, rolling and heat treatment, as processes for welded pipe and finishing plants use much less water.

Of our total water withdrawal, we have mapped 1.4% of this in areas classified by the World Resources Institute's Aqueduct global water risk mapping tool as high and extremely high water stress areas. An additional 10.3% of this is located in medium to high stress areas and around 88.3% in low and low to medium stress areas. There has also been a change from the previous year, as the area where Siderca is located has been moved to a low-to-medium risk area. Siderca continues to develop projects to improve its water management system at the site. Most of our more intensive water-use facilities lie in areas of low or medium water stress risk, according to the afore-mentioned water risk mapping tool, and these sites as a result have high water recycling rates.

We have one facility which is more intensive in terms of water withdrawal and also operates in a high risk area, but in this case, the site employs high water recycling rates.

Reducing the water footprint of our sites is not the only focus of our activity to manage resources responsibly. From a product point of view, our Dopeless[®] connections, for instance, require no water compared with a standard "doped" connection. This is because a Dopeless[®] product does not need to be cleaned while running in the field, and a standard dope thread needs between 10 to 20 liters of water per connection.

WATER RISK LEVELS ACROSS TENARIS'S LOCATIONS





BIODIVERSITY: HELPING TO PROTECT WILDLIFE IN NATIONAL PARKS

Tenaris continues to deepen its partnership with the Rewilding Argentina foundation to conserve and restore local fauna in various parts of Argentina. The company has just signed a two-year cooperation agreement to support a range of environmental conversation and restoration projects in national parks in the provinces of Corrientes, Chaco, Chubut and Santa Cruz.

Tenaris will be donating 1,800 steel pipes, some 17 km worth in total, to build fencing, corrals, cages and aviaries as well as bridges and docks, the infrastructure vital to the Rewilding Foundation's efforts to reintroduce and strengthen native species under threat. These include jaguars and ocelots in the wetlands of Iberá, the giant otter of Chaco in the Impenetrable national park in the northern Gran Chaco region, as well as the guanaco, south Andean *huemul* deer and many endangered bird species in the Patagonian provinces of Chubut and Santa Cruz.

Key indicators

CO, emissions:

Tubular production and processing





Sites covered: Tubular production and processing facilities excluding closed sites



Silcotub, Tamsa

Energy intensity: Sites with steel shops



Sites covered: Dalmine, Koppel, Siderca, Silcotub, Tamsa

Residues & co-products reuse

or recycling: all sites

Recycling content in our steel



Methodology: Proportion of recycled material in our steel calculated according to ISO 14021 standard

Material efficiency: Sites with steel shops



Water withdrawal intensity: Tubular production and processing sites (including steel shops)



Scope & Methodology For environment indicators, the scope is the same as the one for our consolidated accounts, except for those production sites that were not in operation for at least for one month during the reporting year, or whose production is not considered material.

The reference methodologies used to calculate the environmental indicators are aligned with worldsteel, and take into account the Greenhouse Gas Protocol and internal methodologies when applicable. Scope 1 emissions factors use those from worldsteel. Scope 2 is considering local emissions factors for electricity acquired.

(*) Scope 3: 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, direct reduced iron ("DRI"), hot briquetted iron ("HBI"), pig iron, and ferroalloys.

Additionally, we complement our steel needs with the purchase of steel bars from third parties. Our welded steel pipe products are processed from purchased steel coils.

We report Scope 3 emissions related to the purchase of steelmaking raw materials, and steel bars and coils purchased from external suppliers used at our tubular production and processing facilities. Based on results of our life cycle analysis and our certified Environmental Product Declaration, which are available at www.tenaris.com/en/sustianability/environment/, we conclude that raw materials and steel bars and coils are the most relevant source of Scope 3 emissions.

To measure Scope 3 emissions related to raw materials, we follow worldsteel methodology, which is available at https://worldsteel.org/steel-by-topic/environment-and-climate-change/climate-action/ climate-actiondata-collection/

To measure Scope 3 emissions related to steel bars and coils, we consider the guidelines of the Greenhouse Gas ("GHG") Protocol, taking into account the following sources of information: • purchases of steel; applicable emissions factors: and

actual production and consumption level

The emissions factors used for steel bars and coils are based on different sources of information, depending on their availability: e.g., supplier specific data, sector average data from worldsteel or a combination of both.

Even if Scope 3 related to purchased raw materials, and to steel bars and coils, accounts for most of our indirect emissions and helps to provide transparency on our product environmental impact, we will continue to evaluate the relevance of other categories of Scope 3 emissions, e.g., transportation or services, according to the GHG Protocol Corporate Value Chain standard.

Restatement of previous years indicators The following figures have been restated due to changes in boundaries, quantities acquired and/or emissions factors, in order to align scope and methodology for all periods presented: 2019 Scope 2 & 3 CO₂ emissions
2020 Total energy and electricity consumed
2019 and 2020 waste indicators



Innovation and the Value Chain

\rightarrow Our commitment

To develop integrated product and service solutions to meet customer requirements while enhancing safety, efficiency and reliability, and minimizing our environmental impact through the supply chain.

\rightarrow Our objectives

- Develop and improve our product and service portfolio to match evolving customer needs and enter new markets
- Promote supply chain efficiency through more efficient, cleaner and simplified processes, digital integration and the minimization of waste
- Develop reliable and competitive value chains in the countries where we operate

\rightarrow Our actions

Innovation is intrinsic to Tenaris's core values, a central capability underlying our mission to help our people and our organization achieve their full potential. In 2021, we invested USD 45 million in R&D, totaling USD 275 million over the last five years. We carry out R&D activities with a global team of 240 people working at our R&D centers located in Argentina, Italy, and Mexico, coordinated from our main technology offices in Amsterdam.

The main thrust of Tenaris's R&D efforts is to develop new products and applications, as well as testing and qualifying existing ones, to meet the stringent requirements of our customers. The objective is also to improve production processes to achieve optimized and leaner operations, using digital integration, automation and AI initiatives to enhance production management and scheduling as well as improve quality processes and lead times. We are consolidating and developing a product offer for low-carbon energy applications; developing tubulars for industrial uses to perform at higher temperatures and high-resistance steels for air bags; developing Dopeless OCTG connections not requiring dope throughout their lifecycle; heavy-walled line pipes for deepwater applications with enhanced weldability and toughness; and high-performance isolation coatings.

^{USD}

MILLION INVESTMENT IN R&D IN 2021

454 RIGS SUPPLIED UNDER THE RIG DIRECT® MODEL WORLDWIDE IN DECEMBER 2021

240 PEOPLE WORKING IN R&D

41,000 SME EMPLOYEES TRAINED THROUGH PROPYMES

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Trust and collaboration are essential in a digitalized relationship with industry peers.⁹⁹



Alejandro Lammertyn Chief Digital and Information Officer

Committed to the next generation of energy

Tenaris is committed to building a low-carbon product portfolio for the energy transition. We are currently consolidating a casing and tubing product as well as a line pipe offer, in addition to tubes for industrial applications and coatings that will be key for the next generation of energy: hydrogen storage and transportation, carbon capture, use and storage (CCUS), and geothermal energy.

Tenaris's comprehensive R&D program covers several individual projects to ensure a 360° approach, enabling different synergies and combinations with a special focus on the material properties that will be required in these applications.

These projects include an in-depth study of the interaction between multiple steel grades manufactured using different processes with hydrogen and/or CO_2 in varying conditions of purity, pressure and temperature. A similar approach is being taken to casing and tubing connections and coatings.

Tenaris is working with key Joint Industrial Programs (JIPS) to develop hydrogen-related technologies, such as Hyline in Norway and HyBlendTM in the United States. Additionally, we are involved in hydrogen research task forces at the European Pipeline Research Group (EPRG), the European Industrial Gases Association (EIGA) and Det Norske Veritas GL.

In 2021, Tenaris launched THera[™], a new brand to represent its proprietary products and materials technology for hydrogen applications. These include hydrogen storage systems designed to withstand pressures ranging from 240 bar to 1,000 bar; tube trailers customized to meet size specifications for reliable transport options, and a range of solutions for industrial segments such as refineries, hydrocarbons and green/blue hydrogen processing.

Customer integration

Tenaris is transforming the tubular supply chain in the energy industry through its Rig Direct[®] service model. This fully-integrated approach feeds materials from Tenaris production units and service centers around the world to the rigs, ready to be run, thus contributing to simpler, more sustainable and costefficient operations.

By partnering with our customers throughout each step of their projects, we reduce operational costs thanks to an integrated service solution that contemplates every need, from well planning and supply chain integration, to complete logistics execution and after-sales support.



Customer digital integration is an integral part of our Rig Direct[®] service value proposition, and we have been steadily progressing with the use of digital technologies to simplify customer-facing processes and operations through the use of our Rig Direct[®] Portal and our PipeTracer[®] app.

The Rig Direct[®] Portal is a digital platform that allows for a more precise viewing of the entire pipe supply process in coordination with our Rig Direct[®] services, from optimizing the customer's stock to making sure each customer receives the products they need, when they need them. Developed in-house and based on .Net technology, this platform also allows for remote assistance solutions based on existing platforms such as Microsoft Teams, mobile devices and wearable technologies.

Through our PipeTracer[®] app, users can access the technical specifications of our product, including running guidelines, and create digital tallies, eliminating the need for manual measurement, improving accuracy and simplifying operations, therefore enhancing safety.

Currently, over 80% of items ordered by our U.S. Rig Direct[®] customers are made directly using our Rig Direct[®] portal to integrate the order management process, while over 1,000 monthly customer tallies are made digitally using our PipeTracer[®] app.

Closer digital integration has also helped us advance our service assistance in the field. In order to overcome the challenges posed by the pandemic, we designed processes to continue addressing the needs of our customers at the rig during the crisis by providing remote field service assistance.

The pandemic confirmed yet again the value of technology in keeping us connected, operative and leaner even during difficult times. Following the project's success with customers around the world, remote assistance has now become an established solution in an increasingly digital world.



Industry 4.0

We are working to convert our industrial system into a Connected Factory that continuously adjusts and self-optimizes by using predictive analytics, Artificial Intelligence, autonomous robotics, the Internet of Things and Cloud technology.

The comprehensive scenario that Big Data offers is revolutionizing Tenaris's global manufacturing system, allowing for all parts to run processes in a connected, optimized, transparent, agile and proactive manner.

Taking advantage of these interlinked pools of data is helping us to advance every industrial process. Standardized and detailed views of key metrics across Tenaris's global manufacturing system provide a thorough understanding of the performance of each production center in real time, and have also opened up new opportunities in terms of quality, productivity and costs.

The potential uses of new technologies in our industry, such as virtual and augmented reality devices, are wide-ranging. Therefore, our IT and Automation teams are constantly testing and running new applications in order to further optimize processes.

For example, wearable technologies, such as smart glasses, digital assistants and robotic process automation, have contributed to eliminating repetitive tasks and making key data easily accessible remotely, in real time. We are also using locationtracking technologies, video analytics, automated risk detection systems and telemetry to improve operational safety on the shop floor.

Strengthening local supply networks

The economic crisis ensuing from the pandemic has impacted the ways in which companies do business with each other, bringing value-chain management to a crossroads. We know that companies and countries that can increase their resilience as well as their productivity earlier and more efficiently will be the winners over the coming decade, which serves up a unique opportunity to review how we manage our value chain to ensure sustainability underpins every stage of the process.

Our approach to value-chain management is the result of several decades of work to strengthen our local value chains by supporting our suppliers, sharing know-how through various different training and assistance programs.

Our vision is to help them become more competitive by adopting global quality, safety and environmental standards, and developing the resilience to withstand market changes and sustain a solid chain of value.

Assuring quality and ethical standards

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, direct reduced iron ("DRI"), hot briquetted iron ("HBI"), pig iron and ferroalloys. In Argentina we produce our own DRI from iron ore using natural gas as a reductant.

We consume iron ore in the form of pellets, for the production of DRI. Our annual consumption of iron ore during 2021, supplied mainly from Brazil and Canada, was approximately 850,000 tons.

Key indicators

Suppliers by country (*)



(*) 82% of our suppliers are local.

Investment in R&D



Iron ore or other raw materials availability and prices may be negatively affected by events such as interruptions in production, accidents or natural disasters. To mitigate risks, we have been developing alternative suppliers to reduce dependency. Additionally, we can reduce the volume of iron ore used by substituting it with an increased volume of metal scrap.

Working with Exiros, a specialized procurement company whose ownership we share with Ternium, we carry out a rigorous selection process to ensure that all suppliers meet the standards enshrined in our Code of Conduct, and comply with local laws and regulations. We require all our partners in business to observe the same high standards we follow internally governing ethical behavior, legal compliance, and health, safety and environmental responsibilities.

We know that more efficient processes and systems decrease the demand for materials and reduce manufacturing costs, while more responsible HSE practices also lead to cost savings by increasing productivity. We conduct supplier HSE audits and work with them to manage long-term risks.

The HSE audits certify that our service suppliers performing high HSE-risk activities have the right capabilities. As of December 2021, we have audited and certified 80% of our active service suppliers classified as high HSE risk, a prerequisite for the award of a service contract.

The audit is based on Tenaris's standard selfassessment process designed specifically for suppliers wishing to provide services. In 2021, 479 new audits were performed.

Tenaris purchases most of its supplies through Exiros. In December 2021, Exiros had nearly 44,000 registered suppliers, of which more than 15,000 were active during the year, with 8,250 supplying Tenaris. Exiros has a quality system certified under ISO 9001 standards.



PROPYMES

Our ProPymes Program, developed with our sister companies Ternium, Tecpetrol and Techint Engineering & Construction to support Small and Medium-sized Enterprises (SMEs) working in our value chain, this year turned twenty. The achievement was celebrated at a hybrid event held at the end of 2021, featuring speeches from CEO Paolo Rocca as well as members of our ProPymes community and government authorities.

Designed to help SMEs build sustainable and globally-competitive operations, the program was launched in 2001 as a comprehensive corporate program to bolster the value chain, including suppliers and customers, which has grown and evolved with the times.

Today, it supports 938 SMEs in Argentina, promoting business relations, sharing know-how and best practices to help managers and employees alike develop innovative skills and conquer new markets.

SPECIALIST SUPPORT TO EXPAND MARKETS

Thanks to the work carried out by ProPymes over the last twenty years, SMEs have been able to train over 41,000 employees, received more than USD 77 million in credit support from the Techint Group, and exported goods and services worth USD 239 million to other companies in the group. 770 enterprises have taken part in trade missions to explore new markets. In 2021, ProPymes provided specialist support to SMEs supplying the transport industry, focused on trucks and buses powered by Compressed Natural Gas (CNG).

Selected on the basis of their export potential, the quality of their production, and the vision of their leaders, the companies taking part in the program have a vocation for industrial growth. In turn, they benefit from the global leverage offered by the ProPymes Institutional Assistance program, which uses its network to enable SMEs to reach potential customers worldwide. Access to low-cost financing programs helps to maximize investments in productivity and increase capacity, while support is also provided for product development through input from the company's Research Centers.

TRAINING FUTURE TECHNICIANS

ProPymes is also involved in our community education program Technical Gene, supporting technical institutions at secondary level in their task of equipping young people with the skills they need to respond to industrial labor market needs. SMEs taking part in the program offer on-the-job training for future generations of engineers and technicians. In 2021, the Propymes Technical Gene Program offered 2,020 students from forty-five technical schools in forty-three cities the opportunity to put their skills into practice this way.



Human Capital

\rightarrow Our commitment

To lead with care, providing a flexible and agile working environment that encourages health, safety and well-being, as well as accountability, inclusion and trust, and allows employees to develop their skills and careers while contributing to the company's business goals.

\rightarrow Our objectives

- Foster trust and empower employees to manage and promote change and innovation, providing them with the training and technological resources to succeed
- Embed sustainability values through transparent and effective processes, helping employees shape their professional careers
- Encourage continuous learning and feedback through concrete tools
- Respect and promote diversity and inclusion in all its forms, focused on gender, generation and culture

\rightarrow Our actions

Our people, their enthusiasm, ideas, efficiency and skills, are our most valued asset, drivers for innovation which is the precursor for business growth. As a global industry leader, we face a world dynamic tempered by economic uncertainty, technological disruption and trade conflict: nurturing the competence and determination of our teams is more important than ever before to unlock a more sustainable future.

2.0 MILLION HOURS HOURS OF TRAINING DELIVERED IN 2021

93 NATIONALITIES REPRESENTED ON OUR TEAM

99% SUPERVISORS RECEIVED UPWARD FEEDBACK

93%

PARTICIPATION OF PROFESSIONALS IN LAST EMPLOYEE OPINION SURVEY (NOVEMBER 2021)

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Today's workplace dynamic is very complex: including diverse voices is vital to build strong, confident, creative teams, empowering employees to achieve better outcomes and a deeper sense of motivation and belonging.⁹⁹



Luis Scartascini Chief Human Resources Officer

Adapting to change

The disruption and uncertainty brought by the pandemic, still affecting many countries as new variants emerge, has reset work trends. We have adapted by incorporating flexibility in our approach to work and relationships as part of our New Way of Working, including revamping office spaces.

Commensurate with the rise in demand for young talent with digital skills, we are staying relevant by reshaping our own talent management and engagement strategies. We are forging adaptability and resilience, which will be vital to steer us through the post-pandemic scenario.

In response to increased industrial demand for our products, we are expanding our workforce, particularly in the U.S., where new hires are being trained to meet our strict HSE and quality standards.

A new working paradigm

Our New Way of Working strategy, launched at end-2020, posits a new work-life paradigm supported by hybrid work and learning opportunities. With flexibility and relationships as the basis for a new holistic working culture, the focus is on achieving objectives and productivity rather than hours spent in the office.

This is also about greater accountability, trusting in people's sense of responsibility and commitment, framed within a set of nine behaviors to achieve a more rounded approach to work. Central to this is the incorporation of new technologies, encouraging openness to innovation and out-of-the-box thinking as part of a culture fostering constant feedback, agile decision-making skills and intuitive leadership.

TenarisUniversity produced online material about the nine behaviors to help people in this transition.



NEW OFFICE SPATIAL LAYOUT

Commensurate with the change in how people work is the transformation of the workplace itself, as people return to the office with new health and safety protocols in place. Our global redesign plan envisages adapting all office structures, following two pilot projects at our offices and facilities in Argentina. Our new hybrid working arrangements mean people can work for up to two days a week from home, and the workplace becomes an attractive social space for teamwork and group activities. External experts were invited to share insights on decision-making and agenda management for better collaboration and leadership based on active listening and empathy.

Industrial ramp-up

As we shifted course to meet the growing demand for our products following the reactivation of key industries, we had to expand the workforce to sustain the increase in production and meet customer needs.

New workforce recruitment drive

Like industries across the board, we were affected by the resignation of employees of all levels from their jobs, a global economic trend. The resignation rate among our professional employees, which rose from 4.5% to 6.9%, was affected by changing labor market conditions and priorities in Argentina, the U.S. and Canada due to the pandemic. The resignation rate among our shopfloor employees rose to 4%, with the increase concentrated in the United States.

Also, in the U.S., where the post-pandemic recovery had the greatest impact on our industry, we reopened five sites last year after they were closed during the pandemic, prompting a major recruitment drive.

Creating employment

In response, we efficiently coordinated and expanded our internal recruiting capabilities with our network of human resources colleagues across the world to identify suitable current and former employees.

From October 2020 until the end of 2021, we increased our number of employees in the U.S. by 1,200, most of them shop-floor employees, as we re-opened production facilities and ramped up production at our sites. This required an extensive Health, Safety and Environment training drive focused on the new hires to minimize accidents. Annual training hours, excluding on-the-job training, for shop-floor employees with less than one year of seniority came to an average of 56 per person, three times more than for those with over one year of seniority.

Engagement and feedback

The company holds regular engagement, feedback and communications instances to make sure everybody's voice is heard and input received. CEO Live Talks, Area Manager talks and executive Town Hall meetings, are regular occurrences, as well as communications routines, check-in chats and Safe Hour meetings at sites.

This strategy is supported by our Engagement Leaders, a team of 150 directors from all areas of the company trained during a leadership webinar series taught by experts from top international business schools. Their role is to communicate company initiatives and gauge employee satisfaction and well-being.

As well as our six-monthly workplace climate Pulse Surveys, in 2021 we held our Employee Opinion Survey, a far deeper dive into people's ideas, beliefs and feelings. For the first time, the Survey included all Tenaris employees, including shop-floor personnel, whose untiring efforts and commitment during the worst of the pandemic were singled out by Paolo Rocca in his end-of-year letter.

There was a response rate of 93% among professionals who answered thirty-seven questions, showing satisfaction rates of 72%, and a 77% response rate among shop-floor workers who answered eighteen questions and gave the company a satisfaction rating of 73%.

Additionally, some 20,000 comments were received about areas needing improvement, which the company will action over the next few months.

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To keep up with the industrial challenges we are facing, both with the pandemic and the production ramp-up, it's key to provide employees with the right training to operate safely, while improving quality and productivity on the production lines.⁹⁹



Horacio Galli Senior Director, TenarisUniversity

POSITIVE FEEDBACK FROM THE SHOP FLOOR

The first EOS to include shop-floor employees featured eighteen specific questions about the quality of work and training at this level in the company, major issues for a group of our people who have borne the brunt of the pandemic—and aspects which elicited positive responses.

As key workers in an essential industry where working from home is not an option, their work throughout the pandemic has required an exceptional level of commitment, as highlighted by CEO Paolo Rocca in his 2021 year-end letter. He also emphasized the importance of their input in identifying strengths and opportunities for improvement in the workplace. The EOS responses by shop-floor personnel emphasized the value they placed on the quality of training provided: 85% of the positive responses received were related to the assessment of the training they received.

The high degree of commitment and overall satisfaction with the company as well as with the quality of work in general, was also clear from the 80% of positive responses received in answer to questions about people's pride in working for the company, despite the stringent demands faced during the last two years of the pandemic.







Training and development thanks to technology

As the New Way of Working focuses less on roles and more on the skills needed to drive the organization, ensure successful workflows and sharpen its competitive advantage, we adapted our training offer to help employees develop critical skills in the belief that knowledge is one of our core assets.

TenarisUniversity quickly transformed its training offer at the start of the pandemic by going online and developing a new set of courses and programs.

Many of these were hosted on the Degreed Platform, ranging from the practical Pathway series to help employees as they adjusted to the new working environment, to the Digital Mindset program aimed at fostering a greater understanding of innovation and digital change.

Peer-to-peer support for learning

TenarisUniversity also introduced new leadership courses to assist leaders as they faced the challenges of building teams in a virtual format, such as Business Acumen and Management Essentials. These featured a clear and well-structured theoretical framework and learning materials sourced from centers of academic excellence around the world. In 2021, 161 new leaders graduated from the Management Essentials program for new managers.

As the year progressed, it became clear that the management development program needed to incorporate networking as a vital tool, allowing people to share their views and understanding of the course material—and crucially, learn from their peers. This is one of the building blocks of the New Way of Working, and gave rise to the creation of the complementary Peer Learning Communities, enabling people to also develop softer skills, such as active listening and collaborative work. "

The results of our Employee Opinion Survey highlight significant progress in several strategic engagement-related areas, such as company leadership, information flows and flexibility, as well as the quality of training.⁹⁹



Dana Barbara Talent Attraction & Development Senior Director

Augmented reality for training

Although the TenarisUniversity Induction Camp (TUIC) for Global Trainees was put on hold at the start of the pandemic, it gradually resumed, initially online in May 2021, then redesigned as a hybrid program in November 2021 to offer students a blended experience.

In the November 2021 edition, forty-eight young professionals from eight different countries in North and South America took part in the 56th TUIC with online activities, including an augmented reality mill visit, complemented by in-person networking activities held in each region and an active learning project simulating the entire process of a request for proposal.

The Virtual Mill visit was possible thanks to smart glasses technology, which uses RealWear[®] cameras, a new wearable technology introduced recently to help with maintenance activities at the hot rolling mill in Veracruz. The TUIC students were able to virtually tour the steel shop, the Premium 31 line, the R&D Center, Pipe Mill 3 and the Rig Direct[®] Academy.

This unique experience dovetailed with the New Way of Working methodology, also giving participants the opportunity to interact with leaders from top management, who shared their experiences of challenges in Tenaris, and answered questions. We expect to go back to a fully in-person TUIC during the first half of 2022.

Equal opportunities employer

The Tenaris Code of Conduct prohibits unlawful discrimination in employment relationships, granting all people the right to apply for a position in the company, or to be considered for a new post on the criteria of 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.

DIVERSITY AND INCLUSION

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.

In particular, through our opportunity committees, we closely monitor the access of women to leadership positions and those joining the company overall, and implement specific policies to address the gender gap. These include talent review and mentoring programs to eliminate bias and accompany, guide and develop female talent.

We have set ourselves the target of achieving a balance of 50% women throughout our organization, beginning with our commitment to hire at least 50% of women through our Global Trainee Program. As of December 2021, 42% percent of our analysts, 23% of our leaders and managers, and 12% of our middle and top management were women, a significant improvement on previous years' figures, as noted below.



Percentage of women

Percentage of women Shop floor employees by age





Key indicators

Shop floor and professional employees In thousands of people



Professional employees by gender In thousands of people



Senior managers by gender Numbers of persons



Employees' participation in Global Management Programs

Participants per course

Year	τυις	MDP	AMP	LP	BA	ME
2016	145	123	-	42		
2017	65	54	104	40		
2018	133	113	48	38		
2019	183	105	52	39		
2020	-	49	-	-	30	85
2021	86				36	83

TUIC: TenarisUniversity Induction Camp MDP: Management Development Program AMP: Advanced Management Program LP: Leadership Program BA: Business Acumen Program ME: Management Essentials Program





Percentage of professional employees resigning from the company in previous 12-month period.

Total training hours per professional employee



Employees by nationality



Total training hours per shop-floor employee



Senior managers by nationality





Community Relations

\rightarrow Our commitment

To drive inclusive growth and development in the communities where we work and live, promoting a culture that rewards merit and encourages enterprise, as much academically as in terms of personal effort.

\rightarrow Our objectives

- Contribute to improving all levels of education in our immediate and broader communities, with a focus on technical education
- Help preserve our community's identity and heritage
- Encourage creativity and innovation through culture
- Support our communities during crisis (health, education, humanitarian)

\rightarrow Our actions

Our community program reflects over seven decades of industrial tradition worldwide, with a special focus on Latin America. The principle guiding our work is that an industrial project like ours can only be sustainable if community and industry grow together. Our seven global strategic programs are implemented locally, taking into account the particularities of each community where we operate: Roberto Rocca Technical Schools, Technical Gene, AfterSchool Program, Roberto Rocca Scholarships, Film Festivals, Photo Library, and Volunteers in Action.

In 2021, as the world began to adapt to the pandemic, we returned the focus of our community program to education. As in previous years, our direct funding contributions were supplemented by additional funding from our controlling shareholder group, whose intent is to extend the reach and contribution of our program to our communities. The amount of this additional funding was increased in 2020 in response to the pandemic emergency and was further increased in 2021, reflecting the severe education crisis affecting our most vulnerable communities.

USD **14.5** (USD 6.9 MILLION DIRECT) INVESTED IN OUR COMMUNITIES IN 2021

82% ALLOCATED TO EDUCATION IN 2021

17,000 BENEFICIARIES OF OUR GLOBAL AND LOCAL EDUCATION PROGRAMS

122,000

BENEFICIARIES OF OUR GLOBAL AND LOCAL CULTURAL PROGRAMS During 2021, we redesigned our educational programs to support schools with technology, creating educational content for the community and providing scholarships to less privileged students, always recognizing education and merit as tools for social mobility.⁹⁹



Erika Bienek Community Relations Director, Techint Group

In 2021, Tenaris invested USD 6.9 million, an amount complemented by a donation of USD 7.6 million made by our controlling shareholder group to revitalize our education programs as we transition to a post-pandemic environment. Out of the total amount of USD 14.5 million, USD 11.9 million, or 82%, was invested in our education programs.

The COVID-19 pandemic disrupted education systems around the world, affecting nearly 1.6 billion learners in more than 200 countries, a negative trend which had a particular impact on the less advantaged.

In this context, we rapidly strengthened our educational programs in order to offer additional support to the more vulnerable students in our communities. We moved swiftly to redesign, expand and adapt our educational and cultural programs as the situation unfolded, to ensure that our educational programs could be maintained during this difficult time. We developed a remote teaching system to ensure learning continuity, and provided ongoing educational, technological and nutritional support to students throughout the pandemic.

As we enter 2022, we are facing a humanitarian crisis in Europe as a result of the Russian military invasion of Ukraine. Tenaris, together with our controlling shareholder group and Humanitas, are jointly supporting the Red Cross and Fondazione Rava to provide hospitals in Ukraine with medical supplies. In addition, in the communities where we operate in Romania, we are designing education initiatives to support refugee children.

Education at all levels

We believe that education is the key to prosperous community growth and have developed educational programs covering the entire school cycle, from elementary to higher level, helping children to fulfill their potential and become active contributors to society.

The Roberto Rocca Technical Schools Network, Technical Gene, the AfterSchool program and the Roberto Rocca Scholarships—the four global initiatives designed to support education in our communities—continued to invest in students and teachers from twenty communities, working hard to overcome physical, economic and digital barriers.

Developing high standards of technical education

At the heart of our education drive is the network of Roberto Rocca Technical Schools (ETRR, in Spanish) named after one of the company's founders, a firm believer in the synergy between industrial culture and technical education. The ETRR program was launched to educate high-school students from our communities using innovative teaching methods and technologies for classrooms and laboratories. All the students receive different scholarships depending on their needs.

The first School, inaugurated in 2013 in the city of Campana (Argentina), has 428 students, while our sister company Ternium opened a second technical school in 2016, with a capacity of 384 students in the town of Pesqueria (Mexico).



In 2021, the American Chamber of Commerce in Argentina distinguished Tenaris and the ETRR with an award for their outstanding contribution to quality education, in recognition of the educational model deployed by the ETRR during the pandemic and the investments made in local educational infrastructure. These included building eight state-of-the-art technological classrooms in public schools in Campana and Zarate as well as sharing educational material.

Back to school

As the pandemic situation progressed, and schools began to return to in-person classes, we adopted a hybrid teaching method combining face-to-face and online lessons. This brought additional benefits, such as the chance to take part in contests like the Argentine National Robotics Championships, where the ETRR team took second place. Students from the school also competed in the Desafío Eco sustainability race organized by YPF with an electrical car of their own design. They also put their science knowledge to the test in the Argentine Math and Physics Olympics, acquitting themselves with honors at various levels. Final-year students carried out industrial internships at local companies, taking part in projects with significant technological content and exploring the world of work in general. One student worked at the Argentine start-up LIA Aerospace, an aeronautics and space engineering company, on the first stages of a rocket-building project.

We continued to reinforce the Project Based Learning methodology to help students develop Industry 4.0 skills, creating opportunities for them to think outside the box and fostering innovation and teamwork, in addition to critical thinking and communication skills. During 2021, at the annual student project fair, 170 STEM projects (Science, Technology, Engineering and Math) were presented.

Regarding our work in the community, in 2021 we offered Math and Language skills-strengthening courses to 180 elementary school-leavers about to begin high school, and to 329 teenagers from the community interested in joining the School as students. We believe that gifted teachers who are truly committed to both students and the community are a springboard for academic excellence. During 2021, we upgraded our teacher performance evaluation system to include student feedback surveys, in-field classroom observations, and the portfolio of work completed as well as conduct and disciplinary records and a school committee evaluation.

The ability to assess and guide improvement is central to our teacher development plan which rewards performance. In 2021, 115 teachers received 3,210 hours of training on the use of digital platforms and hybrid teaching to help them develop online content and improve methodology.

Strengthening technical education in the community

The Technical Gene program provides schools with infrastructure and equipment, as well as teacher training and on-the-job training internships for highschool students, leveraging the teaching and learning practices developed by the Roberto Rocca Technical Schools program. High-school students have the opportunity to develop Industry 4.0 skills using specific tools to guide their learning.

In addition to infrastructure and equipment, the focus is on developing practical experience through technological projects designed to bring schools closer to industry, which includes on-the-job internships.

Launched in 2006, Technical Gene is currently carried out in ten communities in seven countries. In 2021, 5,769 students and teachers took part in the program. Aware of the far-reaching effects of the COVID-19 pandemic on children and the educational system, we reinforced our support to technical schools in different communities by focusing on three aspects: upgrading infrastructure, by building new workshops and equipping classrooms with technology; providing additional Math training courses for teachers and students; and expanding our alliances with Siemens and FESTO in different countries to offer Industry 4.0 courses at technical schools.

The infrastructure upgrade initiative implemented in Campana, Pindamonhangaba (Brazil), Cartagena (Colombia) and Veracruz (Mexico) involved building technology classrooms, enabling public school students and teachers to access online classes. We also revamped Pneumatics, PLC, and Mechatronic laboratories and modernized installations in general.

In partnership with the German multinational industrial control and automation company FESTO, we provided high-school students with training and certification in Pneumatics, Electropneumatics and PLC.

Teaching new skills

During 2021, we focused on providing teachers with training in Math and digital tools to support online education in Zalau (Romania), Cartagena, Pindamonhangaba and Campana. We also taught students programming and robotics in Pindamonhangaba, Bergamo (Italy) and Veracruz.

Technical school pupils from technical schools in Zalau and Campana performed industrial internships at our mills, while students in Campana built a technological hydroponic vegetable garden monitored by robots.


Starting at a young age

AfterSchool is a Science, Technology, Engineering, Art and Math program for children aged 6-12, aiming at fostering basic literacy, math and social-emotional skills by providing children with quality education, four days a week.

Last year, we organized three international workshops on "Best practices in active learning for primary education" given by experts in education in order to train over 600 educators from Argentina, Uruguay, Brazil, Colombia and Mexico, in topics such as Math, Science and active learning.

Launched in 2009, AfterSchool is currently being implemented in ten communities (including three where the program is run by Ternium, a sister company of Tenaris). In 2021, the program provided students with online classes, adapting its STEM proposal to the needs of each community. As the year progressed, in-person classroom activities resumed in Argentina, Brazil, Colombia and Romania, complying with the health rules in each country. We also implemented the AfterSchool Program in two new schools in Montevideo (Uruguay) and Campana, adding over 150 new students.

Encouraging educational excellence

Launched in 1976 in Argentina, the Roberto Rocca Scholarships program focuses on stimulating academic performance and commitment among highschool students living in Tenaris communities. The program was expanded in 2005 for undergraduate and graduate students to encourage the study of applied science and engineering.

Since 2021, in the case of scholarships for high-school students, in addition to academic excellence, the criteria now include an assessment of the family's socioeconomic situation as part of a drive to promote equal opportunities, in the understanding that education is key to promoting upward social mobility.

In 2021, we awarded 1,222 scholarships to highperforming secondary school students, 474 scholarships to undergraduates, and 10 to doctoral students studying outside their home country.

Culture and tradition

Sharing horizons and remembering our origins

For Tenaris and its sister companies in the Techint Group, art and culture are a source of innovation as well as a means of celebrating diversity and exploring humanity. The foundation of our global arts programs is our partnership with the Fundación PROA in Argentina, whose invaluable expertise and experience guide the development and selection of quality content. In 2021, Tenaris invested USD 1.9 million in cultural activities in eight countries.

Together with Fundación PROA, during 2021 we organized movie screenings in Campana, Zalau, Calarasi and Campina (Romania) as well as Montevideo and Bay City (U.S.), attended by 3,760 spectators.

In 2021, Fundación PROA continued with its art show "Creating Worlds", and presented "Art in Play", an Artists' Film Festival, and "La Suite", featuring a dialogue between pieces in different media, from painting and photography to videos and sound art.

History in the making

In Italy, the Fondazione Dalmine, next to our mill in Bergamo, is responsible for disseminating Tenaris's history and industrial culture, and its archive houses thousands of historical documents telling the stories of industrial development over the last 100 years in the region. Supported by the Techint Group Archive Center in Buenos Aires, the institution hosts cultural events and exhibitions, building and preserving a heritage of shared identities and values. The Fondazione Dalmine per le Scuole program (Dalmine Foundation for Schools), offers elementary and high-school students learning experiences about the region's past and present: in 2021, over 11,000 students took part in online study events and workshops.

At our photo libraries in Campana, Pindamonhangaba, Veracruz and Montevideo, we collect and preserve photographic data recording the history of the locations and communities where we operate, under the guidance of the Fundación PROA. During 2021, we redesigned the Campana and Pindamonhangaba photo libraries to offer users a better experience and encourage people to review the material available.

Tenaris is the main sponsor of the contemporary art Fundación PROA in Buenos Aires, Argentina. It also supports the Galleria d'Arte Moderna e Contemporanea (GAMeC) in Bergamo, which hosts a wide variety of local and international exhibitions, and last year welcomed 61,000 visitors.

Working with its partner PROA and joined by the Campana municipality, Tenaris spearheaded a special project to revamp the city's historic waterfront, paying tribute to its industrial heritage by including a bridge crane from LC2 and a vintage ladle from its steelworks.

Key indicators



Investment in the community

Roberto Rocca Technical School Students involved



Technical Gene

Students and teachers involved



AfterSchool program

Students involved



Roberto Rocca Scholarships program

Students involved





Governance, Risk and Compliance

\rightarrow Our commitment

To build a corporate culture of transparency and integrity based on ethical behavior and compliance with the law.

\rightarrow Our objectives

• Develop and oversee Tenaris's strategy and risk management, taking into account financial, social, environmental and ethical considerations and longterm sustainability.

Corporate governance

Tenaris S.A. was established as a *société anonyme* organized under the laws of the Grand Duchy of Luxembourg on December 17, 2001. As of the date of this report, San Faustin S.A. beneficially owned 60.45% of the Company's outstanding voting shares. San Faustin has controlling interests in Ternium, the leading steel producer in Latin America; Tecpetrol, an oil and gas company; Techint, an engineering and construction company; Tenova, supplying equipment and technologies for iron, steel and mining; and Humanitas, a research hospital network in Italy.

The Company's shares are listed and trade on the Italian Stock Exchange and the Mexican Stock Exchange; and in addition, the Company's American Depositary Shares (ADSs) are listed and trade on the New York Stock Exchange. Management of the Company is vested in a board of directors with the broadest powers 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 current board of directors is composed of eleven directors, of which five qualify as independent directors under applicable U.S. securities regulations, and the Company's articles of association.

The board of directors meets as often as required by the interests of the Company and at least four times per year. In 2021, the Company's board of directors met ten times and adopted one unanimous written resolution. On May 3, 2021, the board of directors appointed Mr. Paolo Rocca as *administrateur délégué* (CEO) 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.

The Company's board of directors has an audit committee, which currently consists of three independent members under applicable U.S. securities regulations and the Company's articles of association.



The audit committee operates under a charter, which sets forth the audit committee's purpose and responsibilities. The audit committee assists the board of directors in its oversight responsibilities related to (i) the integrity of the Company's financial statements; (ii) the effectiveness of the Company's system 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 with 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. For further details of our corporate governance, including our board of directors, audit committee, senior management and major shareholders, please refer to our Annual Report at ir.tenaris.com/ financial-and-sustainability-reports/reports.

Risk management

The Company has established at management level a Critical Risk Committee (CRC) that assists the board of directors, the audit committee and the CEO, in connection with the monitoring, assessment and review of risks to which Tenaris is exposed and regarding the oversight of the risk management framework and processes, with a focus on critical risks (including cybersecurity, environmental, health and safety, product liability, intellectual property, financial reporting and regulatory risks), the development of mitigating actions and the monitoring of action plans. The Critical Risk Committee periodically reports to the board of directors, the audit committee and the CEO on its activities. Risks are identified and managed by management. The CRC facilitates the identification and assessment of critical risks, the development of mitigating actions and the monitoring of action plans. Critical risks are escalated through existing reporting lines and decisions are not dissociated from other management decisions.

The CRC primarily focuses on risks considered critical to the Company's assets, operations or reputation or that have the potential of triggering significant liabilities. We have categorized risk factors according to the potential area impacted, the likelihood of their occurrence and the severity of eventual impact. The main risks we have identified include major events that could be caused by natural disasters, climate change and cybercrime, and regulatory risks.

More recently, the CRC has focused its attention on the preventive measures and mitigating actions in response to the COVID-19 outbreak, the global economic crisis and potential cyberattacks. In addition, the CRC has also worked on climate change related risks. Please see the Risk factors section in our 2021 Annual Report for further information on Tenaris's risks.

Business Conduct: committed to Compliance

Tenaris is committed to building a corporate culture of transparency and integrity based on ethical behavior and compliance with the law. The Company has adopted a general code of conduct incorporating guidelines and standards of integrity and transparency applicable to all of our directors, officers and employees. Our Code of Conduct is reviewed and updated periodically to reflect applicable laws and current trends. The current Code of Conduct was last updated in 2018, to include provisions on the protection of data privacy, the promotion of fair and transparent economic competition, the strengthening of a respectful workplace environment, and respect for human and labor rights. In addition, we have adopted a Code of Ethics for Senior Financial Officers that applies specifically to our CEO, principal financial officer (CFO), principal accounting officer or controller, or persons performing similar functions. This Code of Ethics is intended to supplement the Company's Code of Conduct.

The Company has also adopted a Policy on Business Conduct, which is in effect since 2012. The Business Conduct Compliance Officer (BCCO) is responsible for implementing the Business Conduct Compliance Program aimed at identifying and mitigating corruption risks, managing third-party risk and fostering a culture of compliance, ethical behavior and transparency.

The Company regularly issues, reviews and validates its codes, policies, procedures and standards aimed at ensuring anti-bribery compliance, in keeping with national laws against corruption and bribery, and other international laws such as the U.S. Foreign Corrupt Practices Act (FCPA), the UK Bribery Act and the 1997 Organisation for Economic Co-operation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials.

Tenaris's Business Conduct Compliance Program is a single, risk-based approach to how the Company develops, structures and implements anti-bribery compliance and adherence to ethical business, inherent to interaction with public officials, governmental entities, communities, other public and private corporations, business partners and thirdparty employees.

The Business Conduct Compliance Program develops a variety of preventive actions within the following ten core compliance areas: Risk Assessment and Planning, Normative Framework, Advising and Guidance, Communications, Training, Certifications, Third Parties, Monitoring and Audit, Discipline and Remediation, and Benchmarking and Profession. Tenaris understands that high standards of integrity and transparency can only be achieved by setting common rules among its employees, officers and directors, as well as among the third parties with which it interacts during the course of business. As commitment and compliance with these common rules by Tenaris's suppliers becomes essential for securing Tenaris's goals and expectations on ethical, transparent and rightful behavior, Tenaris has developed a Code of Conduct for Suppliers applicable to suppliers and their respective employees, officials, directors or authorized representatives, in all dealings and transactions involving Tenaris. Diligent and consistent compliance with the provisions of the Code of Conduct for Suppliers will be considered for the selection, retention and evaluation of suppliers.

These activities are based on regular risk evaluations to identify and focus on critical factors and best practices, with a view to developing and applying them with special attention paid to education and risk prevention.

During 2021, Tenaris updated sixteen compliance and ethics-related internal norms, and offered thirty-four in-person or online business conduct training sessions to 742 employees around the world, coming to 1,596 training hours. Training nurtures our compliance culture and raises awareness about taking reliable decisions and preventing bribery, corruption issues or any other actions which disregard company controls. Tenaris also offered e-training to 429 third-party employees based in high-risk countries, totalizing 858 training hours.

Tenaris has implemented standardized processes to evaluate, select and hire representatives or associates, such as commercial intermediaries, customs agents, permitting assistants, advisors and law firms. Procedures include due diligence processes, internal authorization controls and standard provisions to ensure third parties' commitment to comply with Tenaris's anti-bribery and anticorruption policies. Regarding the automation of compliance activities, Tenaris has implemented a digital platform to systematize due diligence procedures carried out on high-risk third parties, including background checks, onboarding, e-training courses and monitoring. Tenaris believes that effective involvement and responsibility of each employee on a daily basis is critical to its ethical culture. As part of the Business Conduct Compliance Program, we promote awareness-raising activities and communicate relevant guidelines, policies and procedures throughout the organization, through newsletters, flyers, banners, stories and notices published on our intranet.

We also hold regular management meetings and distribute educational materials aligned with the industry's best practices. In 2021, our Compliance department issued twenty-eight communication pieces with a global reach within Tenaris.

Regular monitoring and audit activities are performed to verify compliance and to gauge our response capacity worldwide.

Compensation Policy and Report

Tenaris has adopted a Compensation Policy, in compliance with applicable Luxembourg law.

The Compensation Policy, available on the Company's website, sets forth the principles and guidelines for purposes of determining the compensation payable to the members of the Company's board of directors and the CEO.

Tenaris's Compensation Policy seeks to:

- attract, motivate and retain individuals of high professional standing and experience
- promote internal pay equity
- incentivize long-term decision making
- promote sustainability, efficiency and growth
- ensure maximum transparency.

"

Good corporate governance and compliance are the cornerstone of our business strategy, based on best practices and successful experience, to consolidate our role as an industry leader.⁹⁹



Alicia Mondolo Chief Financial Officer

By doing so, Tenaris seeks to continue encouraging long-term shareholder engagement.

On March 30, 2022, the Company's board of directors approved the 2021 Compensation Report, available on the Company's website. In accordance with applicable Luxembourg law, the 2021 Compensation Report will be submitted to the non-binding vote of the shareholders at the next shareholders' annual general meeting, scheduled to be held on May 3, 2022.

The 2021 Compensation Report sets forth the compensation paid or payable to the members of the Company's board of directors and to the CEO for the performance of their duties during the year ended December 31, 2021. Among other issues, the 2021 Compensation Report contains the assessment performed by the board of directors for purposes of determining the CEO's variable compensation for the year 2021, based on a report prepared by an independent compensation consultant and an analysis of Tenaris's annual performance, including financial and non-financial performance indicators.

Compliance Line

Tenaris has a Compliance Line available 24/7 allowing employees, customers, contractors, suppliers and other interested parties to report any conduct contrary to the Code of Conduct or its principles. The Compliance Line operates according to the procedures designed by our Internal Audit function under the direct supervision of our audit committee. All information reported through the Compliance Line is regarded as strictly confidential to the extent allowed by applicable legislation.

In 2021, complaints had a substantiation rate of 55% and led to disciplinary actions, including dismissals and terminating commercial relationships. The reports have also helped to improve the Company's internal control environment. Although complaints can be anonymous, in 75% of cases the complainants identified themselves.

During 2021, the Tenaris Compliance Line was available in nine languages. Reports could be submitted in person, online, by email or through our toll-free numbers available in most of the countries where Tenaris operates.

Shareholder's Compliance Line

Shareholders, investors and other interested parties have access to an exclusive channel to communicate any concerns related to accounting or reporting matters, as well as issues affecting the process of internal control over financial reporting. The Shareholder's Compliance Line is a website directing investors' concerns to the members of the audit committee.

Human Rights

Tenaris is committed to conducting operations in a way consistent with human rights principles by fostering and promoting respect for the fundamental rights and dignity of people. Our Human Rights Policy was adopted in 2009; it was first reviewed in 2018 and more recently updated in March 2022. The Policy provides that Tenaris will act in compliance with the Universal Declaration of Human Rights, the principles articulated in the International Labour Organisation's Declaration of Fundamental Principles and Rights at Work, and the United Nations Global Compact, as well as all human rights laws, rules and regulations applicable in the jurisdictions where it conducts its business. Tenaris is also subject to the 2015 UK Modern Slavery Act and has implemented modern slavery due diligence review to assess commitment and compliance by its suppliers, as well as targeted training for employees performing tasks related to human rights and modern slavery issues. In addition, the Company's Code of Conduct, based on United Nations recommendations, has a specific chapter on "Labor and Human Rights"; and Tenaris's standard terms and conditions for the purchase of goods and services include provisions on compliance with human rights regulations.

Much of the information included in this report expresses our commitment to help our employees and business partners understand and carry out activities in accordance with these principles. They include respect for human freedom and dignity, the prohibition of child labor, forced labor and discriminatory behavior, and the recognition of people's rights to freedom of association and collective bargaining.

Tenaris is a long-term industrial project, and we are convinced that the only way to succeed and prosper is by building long-lasting relations with all our stakeholders, including employees, investors, customers, contractors and suppliers, as well as with the communities where we operate. As part of our risk assessment of suppliers, commercial intermediaries, representatives and other third-party contractors, we have:

i) adopted a due diligence review to verify that third party contractors comply with essential human rights regulations and have not infringed any applicable laws regarding slavery, forced or child labor;
ii) included in our general terms and conditions for the purchase of goods and services, a commitment by third-party contractors to comply with applicable laws, rules and regulations on human rights, including a prohibition of all forms of slavery, forced labor or child labor; and

iii) implemented a Code of Conduct for Suppliers based on United Nations recommendations, which contemplates a specific section concerning "Labor and Human Rights".

The Code of Conduct for Suppliers applies to all our suppliers and must be accepted as a condition for entering into any agreement to provide goods or services to Tenaris.

We value and respect the culture and tradition of the communities where we operate, and we actively work to take into account their health, safety, environment, human rights and economic well-being.

On April 28, 2021, the board of directors approved the Company's annual Modern Slavery Statement, available on www.tenaris.com/en/sustainability/ governance-and-ethics/.

GRI Content Index



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 $^{(3)}$ In the introduction to each of the chapters in the report

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405 405-1	Diversity and Equal Opportunities Diversity of governance bodies and employees	65, 88 , AR Board of directors
412 412-2	Human Rights Assessment Employee training on human rights policies or procedures	79
413 413-1	Local Communities Operations with local community engagement, impact assessments, and development programs	67, 73, 90
414 414-1	Suppliers Social Assessment New suppliers that were screened using social criteria	53, 54

SASB Iron & Steel Producers Content Index



Торіс	Accounting metric	Unit of measure	Code	Page
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO -e, Percentage (%)	EM-IS-110a.1	47, 86, 87
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a	EM-IS-110a.2	10-13, 35-38, 86, 87
Air Emissions	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N ₂ O), (3) SOx, (4) particulate matter (PM_{10}), (5) manganese (MnO), (6) lead (Pb), (7) volatile organic compounds (VOCs), and (8) polycyclic aromatic hydrocarbons ($PAHs$)	Metric tons (t)	EM-IS-120a.1	39, 87
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	EM-IS-130a.1	87
	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	Gigajoules (GJ), Percentage (%)	EM-IS-130a.2	87
Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m ³), Percentage (%)	EM-IS-140a.1	45, 46, 87
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled	Metric tons (t), Percentage (%)	EM-IS-150a.1	40-43, 87
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Rate	EM-IS-320a.1	25, 86
Supply Chain Management	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	n/a	EM-IS-430a.1	53
Activity Metric		Unit of measure	Code	Page
Raw steel produc processes, (2) ele	ction, percentage from: (1) basic oxygen furnace ctric arc furnace processes	Metric tons (t), Percentage (%)	em-is-000.A	86
Total iron ore pro	duction (*)	Metric tons (t)	EM-IS-000.B	None
Total coking coal	production (*)	Metric tons (t)	EM-IS-000.C	None

^(*)We do not produce either iron ore or coking coal. In Argentina we consume iron ore to produce direct reduced iron using gas as a reductant. Our annual consumption of iron ore during 2021 was approximately 768,000 tons.

TCFD Content Index



Disclosure		Page
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	10-13, 75
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	10-13, 75
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	10-13
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	10-13
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	10-13
Risk Management	a) Describe the organization's processes for identifying and assessing climate-related risks.	76, 77
	b) Describe the organization's processes for managing climate-related risks.	76, 77
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	76, 77
Metrics and Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	86, 87
	b) Disclose Scope 1, 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	86, 87
	c) Describe targets used by the organization to manage climate-related risks and opportunities and performance against targets.	10-13

Sustainability Performance Indicators

Indicator	Unit	2019	2020	2021
PRODUCTION				
Cast steel (100% electric arc furnace)	Million tons	2.9	1.8	3.3
Seamless pipes	Million tons	2.6	1.9 (1) 2.7
Welded pipes	Million tons	0.7	0.3	0.2
SAFETY				
Investments in health and safety	USD million	28	21	18
Million hours worked	Employees and contractors	_	_	58
	Employees	-	-	44
	Contractors	-	-	14
Safe hours held	Hours	55,000	36,000	43,000
Injury Frequency Rate (2)	Employees and contractors	3.1	2.8	3.4
	Employees	3.5	3.1	3.7
	Contractors	2.4	2.0	2.6
Lost Time Injury Frequency Rate (3)	Employees and contractors	1.1	1.1	1.0
	Employees	1.0	1.1	1.1
	Contractors	1.2	1.1	0.7
Major Injury Frequency Rate	Employees and contractors	0.26	0.27	0.47
(excluding fatalities) (4)	Employees	0.29	0.32	0.53
	Contractors	0.19	0.10	0.29
Fatalities as a result of work-related injury	Employees number	0	0	0
	Employees rate (5)	0	0	0
	Contractors number	0	0	0
	Contractors rate	0	0	0
Near Miss Frequency Rate (6)	Employees and contractors	18	16	13
	Employees	21	1/	14
	Contractors	12	11	9
ENVIRONMENT				
Investments in environment	USD million	32	11	22
and energy savings				
Emissions				
Greenhouse gas emissions				
CO ₂ emissions from sites with steel shops	CO	4.5	4.0	1.5
Scope 1 emissions	CO_2 million tons	1.6	1.0	1.6
Scope 2 emissions (7)	CO_2 million tons	0.6	0.3	0.7
Scope 3 emissions (8)	CO_2 million tons	1.3	0.6	1.2
Intensity	Ion CO_2 /ton cast steel	1.2	1.1	1.0

Environment indicators cover all tubular production and processing sites that were operative at least one month during the year.

Indicator	Unit	2019	2020	2021
CO ₂ emissions from all sites				
Scope 1 emissions	CO_2 million tons	1.8	1.1	1.9
Scope 2 emissions ⁽⁹⁾	CO_2 million tons	0.8	0.4	0.8
Scope 3 emissions (10)	CO_2 million tons	2.3	1.3	1.7
Intensity	Ton CO_2 /ton steel	1.3	1.3	1.2
	cast/processed			
Intensity from all sites vs. 2018	%	_	-8	-14
Scope 1 emissions from all sites covered	%	-	93	92
under emissions-limiting regulations (11)				
Air emissions				
Particulate material emissions	g/ton product	33	11	17
Nitrogen oxides emissions	Kg/ton product	_	1	1.2
Volatile organic compound emissions from	g/ton product	426	414	396
pipe & coupling varnishing				
Energy management				
Total energy consumed	Terajoules (TJ)	_	31,480	56,178
Total electricity consumed from the grid	LΤ	-	12,135	24,933
Electricity consumption supplied from grid	%	_	_	80
Total fuel consumed	TJ	_	19,345	31,246
-of which natural gas	%	_	93	93
-of which coal	%	_	6	6
-of which other	%	-	1	1
Energy sold	TJ	_	-	1,820
Energy intensity from sites with steel shops	Gigajoules (GJ)/ton cast steel	19	17	16
Water management				
Water withdrawal	Million m ³	59.5	32.9	49.7
-of which surface	%	_	63	73
-of which subsurface	%	_	30	22
-of which network	%	-	7	5
Intensity of water withdrawal at all sites	m ³ water/ton pipe	18	17	17
Intensity of water withdrawal excluding Siderca	m ³ water/ton pipe	6	7	6
Estimated water consumed at all sites	m ³ water/ton pipe	3	4	1
Water withdrawal from high or extremely	%	-	1.4	1.4
high baseline water stress				
Waste Management				
Co-Products and waste				
Material efficiency at sites w/steelshops	%	98.4	99.0	99.0
Residue & co-products reuse or recycle at all sites	%	82.4	91.4	93.3
Waste disposal at all sites	%	9.5	8.6	6.7

Indicator	Unit	2019	2020	2021
HUMAN CAPITAL				
Employees at year-end				
Shop floor	People	17,103	14,063	17,671
-of which female	People	600	439	705
-of which female	%	4	3	4
Professional	People	6,097	4,965	5,105
-of which female	People	1,715	1,402	1,503
-of which female	%	28	28	29
Total employees (full-time)	People	23,200	19,028	22,776
-of which female	People	2,315	1,841	2,208
-of which female	%	10	10	10
Trainees (part-time)	People	475	314	493
Senior managers by gender				
Male	People	1,008	853	854
Female	People	125	125	121
Total	People	1,133	978	975
Male	%	89	87	88
Female	%	11	13	12
Age ranges				
Employees under 30	People	5,193	3,350	5,013
– of which female	People	746	502	690
Employees between 30 and 50	People	14,015	12,384	13,912
– of which female	People	1,275	1,118	1,238
Employees over 50	People	3,992	3,294	3,851
– of which female	People	295	224	280
Average age of workforce	Years	40	40	40
Age ranges for professional employees				
Professionals under 30	People	1,315	899	961
-of which female	%	37%	38%	42%
Professionals between 30 and 50	People	3,756	3,300	3,308
-of which female	%	27%	27%	28%
Professionals over 50	People	1,026	766	836
-of which female	%	20%	22%	22%
Training				
Training hours per professional employee	Hours	57	37	35
Training hours per shop floor employee	Hours, including on the job training	122	68	111
Training hours per shop floor employee	Hours, excluding on the job training	46	22	36
Hours of training	Million hours	2.7	1.2	2.0

Indicator	Unit	2019	2020	2021
Employees by nationality				
Mexican	People	5,595	4,680	5,681
Argentine	People	5,546	4,507	5,319
Italian	People	2,149	2,026	1,989
Romanian	People	1,823	1,562	1,737
USA	People	1,731	1,362	2,190
Brazilian	People	1,372	1,188	1,817
Colombian	People	1,045	750	1,011
Canadian	People	705	519	703
Indonesian	People	616	510	506
Japanese	People	401	399	380
Others	People	2,217	1,525	1,443
Senior managers by nationality				
Argentine	%	37	37	39
Italian	%	16	17	16
Mexican	%	17	15	15
USA	%	5	5	5
Brazilian	%	5	5	5
Romanian	%	4	4	4
Canadian	%	2	2	2
Colombian	%	2	2	2
Japanese	%	2	2	1
Indonesian	%	1	1	1
Others	%	9	10	10
Number of nationalities represented in the employee population	Number	96	88	93
Employees covered by collective bargaining agreements	%	60	66	71
Resignation rate	% All employees	3.7	3.2	4.9
Resignation rates	% Professional employees	4.7	4.5	6.9

Indicator	Unit	2019	2020	2021
COMMUNITY				
Education investment	USD millions	8.1	5.1	4.5
COVID-19 fund	USD millions	-	6.2	0.1
Other community investment	USD millions	3.6	1.4	2.3
Total community investment	USD millions	11.7	12.7	6.9
Technical Gene	N° of students	3,774	1,131	6,411
Technical Gene	N° of teachers	126	102	110
AfterSchool Program	N° of students	1,257	1,473	1,492
Roberto Rocca Education Program-	N° of students	432	415	484
Merit Awards Program - High school	N° of students	1,606	1,335	1,222
ECONOMIC AND FINANCIAL				
Net sales	USD millions	7,294	5,147	6,521
Operating income (loss)	USD millions	832	(663)	708
EBITDA (12)	USD millions	1,372	638	1,359
EBITDA margin	% of net sales	19%	12%	21%
Net income (loss) attributable to owners	USD millions	743	(634)	1,100
Capital and reconvec attributable to expert	LISD millions	11 000	11 262	11.061
of the parent		11,909	11,205	11,901
Net cash provided by operating activities	USD millions	1 528	1 520	119
Capital expenditures	USD millions	350	193	240
R&D investments	USD millions	61	42	45
Dividends	USD millions	153	248	484
Net cash position	USD millions	980	1,085	700
Return on equity (13)	%	6%	-5%	9%
Return on capital employed (14)	%	7%	-6%	7%
FCF Margin (15)	% of net sales	16%	26%	(2%)

(1) Includes 0.1 million tons corresponding to IPSCO not included in the scope of environmental indicators as these facilities were shut down for most of the year.

(2) Number of accidents with and without lost days (not including First Aid) per million hours worked.
 (3) Number of accidents with lost days per million hours worked.
 (4) Number of major accidents per million hours worked.
 (5) Number of fatalities per million hours worked.

- ⁽⁶⁾ Number of incidents per million hours worked.
- (a) Number of incidents per million hours worked.
 (7) Scope 2 emissions are net of sale of energy from our Dalmine power generation facility amounting to 0.12 and 0.06 CO₂ million tons in 2020 and 2021, respectively. Gross CO₂ emissions without netting sale of energy amounted to 0.56 and 0.73, CO₂ million tons, respectively.
 (8) See page 47 for a description of Scope 3 emissions.
 (9) Scope 3 emissions.
- (9)Scope 2 emissions are net of sale of energy from our Dalmine power generation facility amounting to 0.12 and 0.06 CO₂ million tons in 2020 and 2021, respectively. Gross CO₂ emissions without netting sale of energy amounted to 0.56 and 0.90, CO_2 million tons, respectively.

(10) See page 47 for a description of Scope 3 emissions. (11) Includes emissions trading systems and carbon tax whether

implemented or under implementation

- ⁽¹²⁾Operating income (loss) plus depreciation, amortization and
- (13) Net income (loss) / its dependent of the parent / Average equity attributable to owners of the parent.
 (14) Operating income (loss) / (Average equity attributable to
- owners of the parent Average net cash).
- (15) [Net cash (used in) provided by operating activities Capital expenditures] / Net sales.



Independent Limited Assurance Report on a selection of Key Performance Indicators disclosed in Sustainability Report 2021

To the Board of Directors of **Tenaris S.A.**

We have performed a limited assurance engagement with respect to a selection of Key Performance Indicators disclosed in the Sustainability Report 2021 (the "Sustainability Report") of Tenaris S.A. (the "Company" or "Tenaris") as set out in the "Scope" section below.

Scope

The scope of our work was limited to provide limited assurance over the selected Key Performance Indicators as set out in the table of the Appendix 1 attached below (the "Selected Information").

Our assurance was with respect to the year ended 31 December 2021 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2021 Sustainability Report and, therefore, do not express any conclusion thereon.

The Assessment Criteria

The Selected Information was prepared in accordance with certain sections of the Global Reporting Initiative (« GRI ») and of the Sustainability Accounting Standards Board ("SASB") frameworks and additional methodologies defined by Company policies (together the "Assessment Criteria") for the year ending 2021, which are accompanying the KPI disclosures in the Sustainability Report.

Management considers the Assessment Criteria relevant for the purpose of the Company's business and for the ultimate users of the Sustainability Report.

Responsibilities of the Board of Directors

The Board of Directors of the Company is responsible for:

- developing appropriate Assessment Criteria against which to assess the Selected Information and applying these consistently;
- ensuring that those Assessment Criteria are relevant and appropriate to the Company and its shareholders;
- designing, implementing and maintaining internal control procedures that provide adequate control over the preparation and presentation of the Selected Information that is free from material misstatement, whether due to fraud or error;

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- selecting and applying appropriate policies, and making estimates that are reasonable in the circumstances;
- the preparation of the Selected Information in accordance with the Assessement Criteria; and
- the retention of sufficient, appropriate records to support the reported data and assertions included in the Selected Information.

Inherent limitations

The Selected Information needs to be read and understood together with the Assessment Criteria which the Company is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. In addition, greenhouse gas emissions ('GHG') quantification is subject to inherent uncertainty because of such things as emissions factors that are used in mathematical models to calculate emissions and the inability of those models, due to incomplete scientific knowledge and other factors, to precisely characterize under all circumstances the relationship between various inputs and the resultant emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques may result in materially different measurements.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" ("CSSF"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Control 1 as adopted for Luxembourg by the CSSF and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.



Responsibility of the "Réviseur d'entreprises agréé"

Our responsibility is to express a limited assurance conclusion on the Selected Information as set out in the Table of the Appendix 1 attached below based on the procedures we have performed and the evidence we have obtained. We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the "International Auditing and Assurance Standards Board" (IAASB) as adopted for Luxembourg by the "Institut des Réviseurs d'Entreprises". This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the Selected Information has not been prepared, in all material aspects, in accordance with the Assessment Criteria.

A limited assurance engagement involves assessing the suitability in the circumstances of the Company's use of the Assessment Criteria as the basis for the preparation of the Selected Information, assessing the risks of material misstatement of the Selected Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Selected Information.

In a limited assurance engagement, the procedures vary in nature and timing and are less in extent than for a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Within the scope of our engagement we did not perform an audit or a review on external sources of information or expert opinions, referred to in the Sustainability Report.

Within the scope of our limited assurance engagement, we performed, amongst others, the following procedures:

- We gained an understanding of the Selected Information and related disclosures;
- We gained an understanding of the Assessment Criteria and their suitability for the evaluation and /or measurements of the Selected Information;
- We gained an understanding of the internal control procedures in place supporting the gathering, aggregation, processing, transmittal of data and information and reporting of the Selected Information, including controls over third party information (if applicable), and performing walkthroughs to confirm our understanding;
- Based on that understanding, we assessed the risks that the Selected Information may be materially misstated and determination of the nature, timing and extent of further procedures;
- We inquired relevant Company management, personnel and third parties;
- We performed analytical procedures related to the Selected Information;
- We considered the significant estimates and judgements made by management in the preparation of the Selected Information;



- We inspected, on a selective basis, documents to verify the representations made by the management and senior management in our interviews; and
- We reviewed the presentation of the selected information and related disclosures included in the 2021 Sustainability Report.

Limited Assurance Conclusion

Based on the procedures we have performed and evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Selected Information for the period from 01 January 2021 to 31 December 2021 has not been prepared, in all material aspects, in accordance with the Assessment Criteria.

Restriction on Use and Distribution of our Report

Our report has been prepared for, and only for, the Board of Directors of Tenaris, and solely for the purpose of reporting to them the "Selected Information" disclosed in the Sustainability Report and no other purpose. We will not, in giving our conclusion, accept or assume responsibility (legal or otherwise) or accept liability for, or in connection with, any other purpose for which our report including the conclusion might be used, or to any other person to whom our report will be shown or into whose hands it might come, and no other persons shall be entitled to rely on our conclusion.

PricewaterhouseCoopers Société coopérative Represented by Luxembourg, 30 March 2022

Gilles Vanderweyen Réviseur d'entreprises agréé



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
102-8 / 405-1	-	Professional employees by gender	Professional employees - Male	Number of people
102-8 / 405-1	-	Professional employees by gender	Professional employees - Female	Number of people
102-8 / 405-1	-	Senior Managers by gender	Senior Managers – Male	Number of people
405-1	-	Senior Managers by gender	Senior Managers – Male	%
102-8 / 405-1	-	Senior Managers by gender	Senior Managers – Female	Number of people
405-1	-	Senior Managers by gender	Senior Managers – Female	%
102-8 / 405-1	-	Senior Managers by gender	Senior Managers – Total	Number of people
201-1	-	Direct economic value generated and distributed	Net sales	USD million
201-1	-	Direct economic value generated and distributed	Operating income (loss)	USD million
201-1	-	Direct economic value generated and distributed	EBITDA	USD million
201-1	-	Direct economic value generated and distributed	EBITDA margin	% of net sales
201-1	-	Direct economic value generated and distributed	Net income (loss) attributable to owners of the parent	USD million
201-1	-	Direct economic value generated and distributed	Equity attributable to owners of the parent	USD million
201-1	-	Direct economic value generated and distributed	Cash flow from operations	USD million
201-1	-	Direct economic value generated and distributed	Capital expenditures	USD million
201-1	-	Direct economic value generated and distributed	R&D investments	USD million

Appendix 1 – Table of Selected Information



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
201-1	-	Direct economic value generated and distributed	Dividends	USD million
201-1	-	Direct economic value generated and distributed	Net financial position	USD million
201-1	-	Direct economic value generated and distributed	Return on equity	%
201-1	-	Direct economic value generated and distributed	Return on capital employed	%
201-1	-	Direct economic value generated and distributed	FCF Margin	% of net sales
201-1	-	Direct economic value generated and distributed	Economic value generated	USD billion
201-1	-	Direct economic value generated and distributed	Economic value distributed in suppliers	USD billion
201-1	-	Direct economic value generated and distributed	Economic value distributed in community investments	USD million
201-1	-	Direct economic value generated and distributed	Economic value distributed in research and development	USD million
201-1	-	Direct economic value generated and distributed	Economic value distributed in capital providers	USD million
201-1	-	Direct economic value generated and distributed	Economic value distributed in taxes	USD million
201-1	-	Direct economic value generated and distributed	Economic value distributed in capex	USD million
201-1	-	Direct economic value generated and distributed	Economic value distributed in employees	USD billion
203-1	-	Infrastructure investments and services supported	Net sales	USD million



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
203-1	-	Infrastructure investments and services supported	Operating income (loss)	USD million
203-1	-	Infrastructure investments and services supported	EBITDA	USD million
203-1	-	Infrastructure investments and services supported	EBITDA margin	% of net sales
203-1	-	Infrastructure investments and services supported	Net income (loss) attributable to owners of the parent	USD million
203-1	-	Infrastructure investments and services supported	Equity attributable to owners of the parent	USD million
203-1	-	Infrastructure investments and services supported	Cash flow from operations	USD million
203-1	-	Infrastructure investments and services supported	Capital expenditures	USD million
203-1	-	Infrastructure investments and services supported	R&D investments	USD million
203-1	-	Infrastructure investments and services supported	Dividends	USD million
203-1	-	Infrastructure investments and services supported	Net financial position	USD million
203-1	-	Infrastructure investments and services supported	Return on equity	%
203-1	-	Infrastructure investments and services supported	Return on capital employed	%
203-1	-	Infrastructure investments and services supported	FCF Margin	% of net sales
302-1	EM-IS- 130a.2.	Energy	Total fuel consumption within the organization - Non renewable sources	Tera Joules (TJ)



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
-	EM-IS- 130a.2.	Energy	Fuel consumption- Coal + Gas Coke	%
-	EM-IS- 130a.2.	Energy	Fuel consumption- Natural Gas	%
-	EM-IS- 130a.2.	Energy	Fuel consumption- Other (Diesel)	%
302-1	-	Energy	Total sold by type of energy use	Tera Joules (TJ)
302-1	EM-IS- 130a.1.	Energy	Total energy consumption	Tera Joules (TJ)
-	EM-IS- 130a.1.	Energy	Electricity/Energy consumption - Supplied from grid electricity.	%
303-3	EM-IS- 140a.1	Water withdrawal	Water withdrawal	Million m3
303-3	-	Water withdrawal	Average water intake - Surface water	%
303-3	-	Water withdrawal	Average water intake - Subsurface water	%
303-3	-	Water withdrawal	Average water intake - Network water	%
303-3	EM-IS- 140a.1.	Water withdrawal	Water intake - Extremely high and high water stress areas	%
303-3	-	Water withdrawal	Water intake - Medium-high water stress areas	%
303-3	-	Water withdrawal	Water intake - Low-medium and low water stress areas	%
305-1	EM-IS- 110a.1./2	CO2 emissions from sites with steel shops	Scope 1 emissions	CO2 million ton
305-1	EM-IS- 110a.1	CO2 Emissions from all sites	Scope 1 emissions	CO2 million ton
-	EM-IS- 110a.1./2	CO2 Emissions from all sites	Scope 1 emissions - Percentage covered under emissions-limiting regulations	%
305-2	-	CO2 emissions from sites with steel shops	Scope 2 emissions	CO2 million ton
305-2	-	CO2 Emissions from all sites	Scope 2 emissions	CO2 million ton
305-3	-	CO2 emissions from sites with steel shops	Scope 3 emissions	CO2 million ton
305-3	-	CO2 emissions from all sites	Scope 3 emissions	CO2 million ton



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
403-9	-	Health & Safety	Injury Frequency Rate - Employees and contract employees	Rate
403-9	-	Health & Safety	Fatalities as a result of work-related injury - Employees	Number
403-9	EM-IS- 320a.1.	Health & Safety	Fatalities as a result of work-related injury - Employees	Rate
403-9	-	Health & Safety	Fatalities as a result of work-related injury- Workers who are not employees but whose work and/or workplace is controlled by the organization - Contract employees	Number
403-9	EM-IS- 320a.1.	Health & Safety	Fatalities as a result of work-related injury- Workers who are not employees but whose work and/or workplace is controlled by the organization – Contract employees	Rate
403-9	-	Health & Safety	High-consequence work-related injuries (excluding fatalities) – Employees	Number
403-9	-	Health & Safety	High-consequence work-related injuries (excluding fatalities) – Employees	Rate
403-9	-	Health & Safety	High-consequence work-related injuries (excluding fatalities)- Workers who are not employees but whose work and/or workplace is controlled by the organization - Contract employees	Number
403-9	-	Health & Safety	High-consequence work-related injuries (excluding fatalities)- Workers who are not employees but whose work and/or workplace is controlled by the organization - Contract employees	Rate
403-9	-	Health & Safety	Recordable work-related injuries – Employees	Number
403-9	EM-IS- 320a.1.	Health & Safety	Recordable work-related injuries / Total recordable incident rate (TRIR) – Employees	Number



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
403-9	EM-IS- 320a.1.	Health & Safety	Recordable work-related injuries / Total recordable incident rate (TRIR) - Workers who are not employees but whose work and/or workplace is controlled by the organization / Contract employees	Number
403-9	EM-IS- 320a.1.	Health & Safety	Recordable work-related injuries / Total recordable incident rate (TRIR) - Workers who are not employees but whose work and/or workplace is controlled by the organization – Contract employees	Rate
-	EM-IS- 320a.1.	Health & Safety	Near miss frequency rate (NMFR) - Employees	Rate
-	EM-IS- 320a.1.	Health & Safety	Near miss frequency rate (NMFR) - Contract employees	Rate
-	EM-IS- 320a.1.	Health & Safety	Near miss frequency rate (NMFR) - Total	Rate
403-9		Health & Safety	Number of hours worked - Employees	Number of hours
403-9		Health & Safety	Number of hours worked - Workers who are not employees but whose work and/or workplace is controlled by the organization / Contract employees	Number of hours
405-1	-	Professional employees by gender	Professional employees - Male	%
405-1	-	Professional employees by gender	Professional employees - Female	%
405-1		Board Employees by gender	Board Employees – Male	%
405-1		Board Employees by gender	Board Employees – Female	%
405-1		Board Employees by gender	Board Employees – Male	Number of People
405-1		Board Employees by gender	Board Employees – Female	Number of People
405-1		Total Board Employees	Board Employees – Total	Number of People
405-1		Age ranges	Board Employees under 30	%



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
405-1		Age ranges	Board Employees between 30 and 50	%
405-1		Age ranges	Board Employees over 50	%
405-1		Age ranges	Board Employees under 30	Number of People
405-1		Age ranges	Board Employees between 30 and 50	Number of People
405-1		Age ranges	Board Employees over 50	Number of People
405-1		Board Employees by nationality	Board Employees by nationality – Mexican	Number of People
405-1		Board Employees by nationality	Board Employees by nationality – Argentinian	Number of People
405-1		Board Employees by nationality	Board Employees by nationality - Italian	Number of People
405-1		Board Employees by nationality	Board Employees by nationality - French	Number of People
405-1		Board Employees by nationality	Board Employees by nationality – American	Number of People
405-1		Board Employees by nationality	Board Employees by nationality – Brazilian	Number of People
405-1		Board Employees by nationality	Board Employees by nationality - Belgian	Number of People
405-1	-	Age ranges	Employees under 30	Number of People
405-1	-	Age ranges	Employees under 30 - of which women	Number of People
405-1	-	Age ranges	Employees between 30 and 50	Number of People
405-1	-	Age ranges	Employees between 30 and 50 - of which women	Number of People
405-1	-	Age ranges	Employees over 50	Number of People
405-1	-	Age ranges	Employees over 50 - of which women	Number of People
405-1	-	Age ranges	Average age of the workforce (in years)	Number of People
405-1	-	Age ranges	Employees under 30 - Shop Floor	Number of People
405-1	-	Age ranges	Employees under 30 - Shop Floor	%
405-1	-	Age ranges	• of which women	Number of People



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
405-1	-	Age ranges	Employees between 30 and 50 - Shop Floor	Number of People
405-1	-	Age ranges	Employees between 30 and 50 - Shop Floor	%
405-1	-	Age ranges	• of which women	(No.)
405-1	-	Age ranges	Employees over 50 - Shop Floor	Number of People
405-1	-	Age ranges	Employees over 50 - Shop Floor	%
405-1	-	Age ranges	• of which women	Number of People
405-1	-	Age ranges	Professionals under 30	Number of People
405-1	-	Age ranges	Professionals under 30	%
405-1	-	Age ranges	• of which women	Number of People
405-1	-	Age ranges	Professionals between 30 and 50	Number of People
405-1	-	Age ranges	Professionals between 30 and 50	%
405-1	-	Age ranges	• of which women	Number of People
405-1	-	Age ranges	Professionals over 50	Number of People
405-1	-	Age ranges	Professionals over 50	%
405-1	-	Age ranges	• of which women	Number of People
405-1	-	Employees by nationality	Mexican	Number of People
405-1	-	Employees by nationality	Mexican	%
405-1	-	Employees by nationality	Argentine	Number of People
405-1	-	Employees by nationality	Argentine	%
405-1	-	Employees by nationality	Italian	Number of People
405-1	-	Employees by nationality	Italian	%
405-1	-	Employees by nationality	Rumanian	Number of People
405-1	-	Employees by nationality	Rumanian	%
405-1	-	Employees by nationality	American	Number of People



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
405-1	-	Employees by nationality	American	%
405-1	-	Employees by nationality	Brazilian	Number of People
405-1	-	Employees by nationality	Brazilian	%
405-1	-	Employees by nationality	Colombian	Number of People
405-1	-	Employees by nationality	Colombian	%
405-1	-	Employees by nationality	Canadian	Number of People
405-1	-	Employees by nationality	Canadian	%
405-1	-	Employees by nationality	Indonesian	Number of People
405-1	-	Employees by nationality	Indonesian	%
405-1	-	Employees by nationality	Japanese	Number of People
405-1	-	Employees by nationality	Japanese	%
405-1	-	Employees by nationality	Others	Number of People
405-1	-	Employees by nationality	Others	%
405-1	-	Employees by nationality	Number of nationalities represented in the employee population	Number of People
405-1	-	Senior Managers by nationality	Argentine	%
405-1	-	Senior Managers by nationality	Italian	%
405-1	-	Senior Managers by nationality	Mexican	%
405-1	-	Senior Managers by nationality	American	%
405-1	-	Senior Managers by nationality	Brazilian	%
405-1	-	Senior Managers by nationality	Romanian	%
405-1	-	Senior Managers by nationality	Canadian	%



GRI	SASB	Торіс	Key Performance Indicator	Measure Unit
405-1	-	Senior Managers by nationality	Colombian	%
405-1	-	Senior Managers by nationality	Japanese	%
405-1	-	Senior Managers by nationality	Indonesian	%
405-1	-	Senior Managers by nationality	Others	%
414-1 / 308-1	EM-IS- 430a.1.	New suppliers that were screened using social and environmental criteria	Percentage of certified suppliers over our active service suppliers classified as high HSE risk suppliers.	%
414-1 / 308-1	EM-IS- 430a.1.	New suppliers that were screened using social and environmental criteria	All our suppliers meet the standards enshrined in our QHSE policy and Code of Conduct.	%

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