



# Sustainability Report

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2020

**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

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2020 was a particular year which has left an indelible mark on the world. The pandemic is reshaping societal expectations and changing established paradigms. But it is still too early to understand the full extent of the transformation that it will bring. The energy transition is also accelerating. We, as a company, wish to maintain flexibility as we redefine our strategy and actions to meet the new realities.

At Tenaris, we opened the year by concluding the acquisition of IPSCO and with the expectation that U.S. drilling activity would soon start to recover after a year-long decline. Instead, shortly thereafter, everything changed as the pandemic spread rapidly around the world. From one day to the next, demand for our products and services began to shrink and our way of working changed. Global oil demand collapsed and oil prices with it, even becoming negative at one point. In the U.S., drilling activity plunged precipitously and we had to close most of our newly acquired facilities.

The challenges involved every aspect of our business and affected all our employees. We adopted new safety protocols to ensure the safety of all persons entering our plants and offices, and halted production while minimizing labor cost inefficiencies in response to plummeting demand. We provided support for the medical systems in many of our communities, and found new ways of meeting customer commitments, changing the way we work and communicate. At the same time, we implemented an intense restructuring program to ensure the financial stability and long-term sustainability of our company.

We responded rapidly and have been disciplined in implementing our objectives. I would like to give a special thanks to all our employees for the way they adapted to the circumstances and for their contribution to our efforts in what has been an extraordinarily difficult year.

Our focus was on establishing a safe working environment at our plants and offices and adapting to an environment where employees could work from home. With the pandemic affecting the lives of all our employees and their families, we worked hard to maintain good levels of engagement and promote wellbeing, as well as adapting our training programs to the changed circumstances.

Since the start of the pandemic, we have had 2,400 persons affected by the virus among employees and contractors, an infection rate of just over 10%. Currently, we have less than 100 active cases and still have 550 people in the “at risk” category who are prevented from coming to work. At the same time, despite the constantly changing production schedules at our plants, we maintained the improvements we made over the past years in our physical safety indicators.

To reinforce the medical systems and infrastructure in our communities, particularly in Latin America, we quickly deployed a dedicated USD 6 million fund. Leveraging our global procurement structure, we sourced and delivered ventilators, Intensive Care Unit (ICU) equipment units, and Personal Protection Equipment (PPE) items to medical centers and were instrumental in the deployment of four new field hospitals in our diverse communities.

Our employees were quick to show solidarity and initiative. At the onset of the pandemic, in Bergamo, which was then the epicenter of the contagion in Europe, they worked tirelessly to produce oxygen cylinders for the local hospitals. In Campana, they designed and produced 80,000 face shields for medical staff and first responders in the local community using one of our finishing lines.

In addition to maintaining service quality in a rapidly changing environment, we reinforced our Rig Direct® customer programs by integrating digital initiatives aimed at simplifying operational and administrative processes and making them more reliable. In the U.S., for example, two thirds of call-outs made by our Rig Direct® customers are now made through our Rig Direct® portal, and several are starting to use our PipeTracer® system to perform digital tallies. We will continue to deepen these digital integration initiatives to reinforce service differentiation and customer loyalty.

To secure the financial stability of the company, we implemented a detailed plan to reduce our fixed cost structure by 25%, by the end of 2020, and to generate cash through reducing inventories, managing receivables closely and reducing investments.

We have met or exceeded our targets, generating USD 1.3 billion in free cash flow for the year, which includes a USD 1.1 billion reduction in working capital. If we exclude impairment and restructuring charges, our net income for the year would have been positive.

In the fourth quarter, we ended the year with a higher EBITDA margin than we had at the end of 2019, despite a 35% drop in revenues year-on-year. With these results, a strong balance sheet and a brighter outlook ahead, we are proposing to reinstate the annual dividend at 50% of the level it was prior to the pandemic.

As drilling activity in North America picks up, we are strengthening our position in the U.S. and Canadian markets, building on our Rig Direct® service proposition, and taking advantage of the market opportunities offered by consolidation in the shale sector and the competitive environment.

We are preparing to operate Bay City at full capacity and to restart the Koppel steel shop and Ambridge seamless pipe mill together with their associated finishing facilities later this year. Meanwhile, we are proceeding with a USD 72 million investment to increase our domestic production capabilities by integrating seamless, premium and welded pipe production at our mill in Sault Ste. Marie after closing the Prudential mill in Calgary.

In offshore markets, we have strengthened our position through the introduction of BlueDock® connectors in the Gulf of Mexico and Guyana, while, in Brazil, we are also successfully introducing our seamless pipe products to complement our welded pipe and connector solutions in the Brazilian pre-salt market.

In Argentina, the implementation of the new Plan Gas aimed at reducing the level of gas imports is helping to restart activity in the Vaca Muerta shale play. In Colombia, we are strengthening our Rig Direct® programs with Ecopetrol and other operators using digital integration initiatives.

In the Middle East, we are supplying the casing for the expansion of the North Field in Qatar, which will supply the gas for the recently sanctioned Qatar LNG expansion. These products will include our Dopeless® technology, which is now firmly established in this market. Although demand in the Middle East during 2021 will be affected by ongoing destocking in key markets, we continue to consolidate our position in the UAE with investments in a premium threading facility which will begin operating in 2022.

In China, we established a joint venture with state-owned Baogang Baotou Steel, a large integrated steel maker in Inner Mongolia which supplies casing and tubing to China's onshore oil and gas fields. The joint venture, in which we have a 60% shareholding, will install a premium threading facility, with an initial annual capacity of 45 thousand tons, to thread TenarisHydril premium connections on Baogang's pipe. The new facility is expected to start operations at the end of 2021.

Decarbonization has become a major issue for the whole world and, in particular, for our industry. In February 2021, our Board of Directors approved a medium-term target to reduce the carbon emissions intensity of our operations by 30% from a 2018 baseline and the introduction of an internal carbon price of USD 80 per ton to accelerate the investments and changes necessary to achieve this target and our long-term objective of eventually reaching carbon neutrality. We will continue to add transparency to this program, which will be followed on a quarterly basis in our Board. This will become an ever more important part of our agenda in the coming years.

Moreover, our customers, as they pursue their own decarbonization initiatives, are looking more closely at the carbon footprint of their supply chains, particularly for steel products. With our new medium-term reduction target, we expect to maintain or enhance the competitive differentiation we consider that we have today in this area.

We are also positioning ourselves in new segments associated with the energy transition, developing our product and service portfolio for these applications. Although our sales for low carbon energy applications are marginal today, they will increase over time.

Today, we are playing an active role in projects for building the new infrastructure for hydrogen mobility, as suppliers of large, high-pressure vessels for hydrogen filling stations particularly in Europe and California, and we have recently been selected to supply the pipe for the main pipeline in the pioneering Northern Lights CO<sub>2</sub> transportation and storage project in Norway.

As the world's economy recovers from the worst effects of the pandemic, Tenaris, with its solid financial position and extensive global agenda, is well positioned to face the new challenges ahead.

I would like to thank our employees again for their contributions over the past year, as well as our customers, contractors, suppliers and shareholders for their continued support.

Sincerely,



Paolo Rocca  
March 29, 2021

# COVID-19

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In March 2020, the World Health Organization declared that COVID-19, caused by the SARS-CoV-2 coronavirus strain, was a global pandemic, prompting governments around the world to take containment measures to curb the spread of the disease.

Many countries where Tenaris operates introduced bans on industrial and business activities, triggering a major fall in the world economy and a crisis in the energy sector, with plummeting oil consumption leading to a collapse in prices and acute oversupply.

Although oil and gas demand is recovering, and excess inventories accumulated in the first half of the year are steadily being drawn down, the market for our products and services has been severely affected, as our customers have reduced their capital investments. Within this context, we focused on four lines of action in order to maintain operations.

A comprehensive series of measures were taken at the outset to safeguard the health and safety of our employees, customers, contractors and suppliers, introducing remote working for office staff, and restricting onsite access to essential personnel envisaging a gradual return to production as circumstances allowed.

A special operations protocol was implemented including temperature checks, disinfection stations, and new floor and circulation layouts to respect social distancing rules, while medical support was provided for those with potential symptoms and personal protective equipment (PPE) kits distributed among staff.

As employees gradually return to the workplace, we have adapted policies to take account of what we learned from this experience, introducing more flexibility and placing greater emphasis on the wellbeing of our people.

Tenaris promptly took steps to ensure its financial stability, implementing a worldwide program to reduce its fixed cost structure, including salary reductions at all but the lowest levels. Variable costs were adjusted to reduce production levels, deploying furlough schemes where possible, and decreasing capital expenditure, R&D expenses and working capital. Investments were either put on hold or minimized, except for those essential to the company's sustainability and positioning in the long term.

As a result, by year-end, the company had reduced its fixed cost structure in excess of its original target of USD 230 million annualized, creating an additional USD 1.1 billion in cash flow by reducing working capital. In agreement with its shareholders, it also cancelled its main dividend payment for the 2019 fiscal year, usually paid in May.

As it has done in past crises, Tenaris mobilized its resources to support its communities. A USD 6.2 million fund was set up, supplemented by USD 1.3 million contributed by our controlling shareholder group. We drew on our global capabilities (procurement and engineering) to strengthen local health providers, supplying essential equipment such as ventilators, beds and infusion pumps to ICUs, and biosafety kits including PPE for hospitals.

Infrastructure was made available to help local authorities boost their response to the pandemic, including the use of the Siderca Hotel in Campana, and funds went to building field hospitals in Argentina and Italy. We produced essential equipment, such as gas cylinders and face shields in our plants, and provided support to local entrepreneurs to extend the supply of face shields.





The deployment of our community emergency support investment plan in Argentina, including building the Austral Solidarity Hospital, earned Tenaris the AmCham Business Citizenship Award.

Meanwhile, the Humanitas Hospital network in Italy made available its extensive knowledge and expertise to local medical communities where Tenaris operates, through videoconferences and a web portal.

From the outset of the pandemic, in spite of the disruptions to our operations, we focused efforts on fulfilling all our customer and supplier commitments. We accelerated the introduction of digital initiatives to strengthen supply chain integration under our Rig Direct® service program and began to deliver services, such as technical assistance for running pipe and training, on a remote basis.

Further information is available in the various chapters of this report on the actions taken to safeguard the sustainability of the Company in response to the pandemic.

## Supporting the communities

USD

**6.2**  
MILLION  
COVID-19 FUND

**87**  
VENTILATORS

**2,694**  
PIECES OF  
HOSPITAL ICU  
EQUIPMENT

**460,000**  
PPE FOR MEDICAL  
PERSONNEL

# Sustainability in Tenaris

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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 19,000 people worldwide, we work with our customers to meet their needs in a timely manner, observing the highest levels of product performance and reliability.

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/](http://www.tenaris.com/en/sustainability/)), which, together with our Code of Conduct ([www.tenaris.com/en/sustainability/governance-and-ethics/](http://www.tenaris.com/en/sustainability/governance-and-ethics/)), is embedded in all aspects of our business processes. This report, now in its seventh 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. Tenaris's Human Rights Policy pledges to conduct all company operations in a manner that is consistent with human rights principles.

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. For the past three years, worldsteel has named Tenaris a Sustainability Champion for "leading the way in creating a truly sustainable steel industry and society".

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.



The company's diversity, inclusion and engagement strategy is a key part of its sustainability efforts, as its future is intrinsically linked to the people it employs and the places where it operates.

## Our reporting, in context

Tenaris is committed to strengthening a corporate culture of integrity, transparency and rational decision-making. We aim to transparently disclose and communicate all issues that can affect, positively or negatively, our stakeholders, both internal and external.

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 Resources; Community Relations; and Governance, Risk and Compliance.

The material topics defined cover our whole value chain, from sourcing, product manufacturing and services delivery, to the end use of our products. They include information gathered from our stakeholders as well as our internal strategy and objectives.

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 29, 2021, as part of our 2020 Annual Report, and includes the non-financial information required to be disclosed as part of the company's reporting requirements in accordance with Luxembourg law.<sup>(1)</sup>

<sup>(1)</sup> 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.

# Climate Change

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In February 2021, our Board of Directors approved 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, 2 and 3 emissions. We aim to achieve this target by using a higher proportion of recycled steel scrap in the metallic mix, investments to increase energy efficiency, and the use of renewable energy for part of our energy requirements.

This target forms part of a broader long-term objective of reaching carbon neutrality. Our ability to reach this objective will depend on the development of emerging technologies and market and regulatory conditions, including carbon pricing and customer support. To further our longer-term objective, we plan to actively pursue the development of technologies involving the use of hydrogen and carbon capture with partners, and participate in pilot projects such as the one we announced to use hydrogen in our Dalmine steel shop in Italy.

To accelerate the fulfilment of these targets, we will implement an internal carbon price of USD 80/ton for evaluating investments, and more generally in our operations.

Our sister company, Tenova, a supplier of innovative technologies for the metals and mining industries, has developed a smart burner for the reheating furnaces that are currently a significant source of emissions in seamless steel pipe operations. The new flameless burner system, successfully tested with 100% hydrogen, has the potential to achieve zero CO<sub>2</sub> emissions, working with a full range of both hydrogen and natural gas mixtures.

The development, which is ready for installation at industrial scale, will be a major asset as hydrogen becomes more accessible for industrial use, contributing to reducing emissions for steel production and downstream reheating processes.

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, knowing that there is no single alternative, 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 constantly monitor the evolution of the strategies of our main customers and their scenarios for future energy demand, considering the global objectives for addressing climate change through the reduction of carbon emissions enshrined in the Paris Agreement and national objectives to achieve a carbon-neutral world.

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 and international agencies such as the International Energy Agency (IEA), with particular reference to those scenarios which are consistent with the goals of the Paris Agreement. These assessments are used as fundamental input for evaluating our business strategy and how to address the risks and opportunities arising from climate change.

## Decarbonization strategy

**-30%**  
TARGET  
2030

**REDUCTION IN CO<sub>2</sub> INTENSITY**  
per ton of steel (Scopes 1, 2 & 3) vs. 2018 values

**80 USD**  
per ton CO<sub>2</sub>

**Internal  
carbon  
price**



**Collaboration with  
partners to minimize  
CO<sub>2</sub> footprint**



**Increase  
scrap use**



**Energy  
efficiency**



**Wasted energy  
recovery**



**Clean  
electricity**



**Green  
H<sub>2</sub>**



**Carbon capture  
and utilization**

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 storage (CCS) and geothermal installations.

We are increasing our investments in R&D and organizational focus in these areas, which are expected to contribute a significant revenue stream to the company going forward.

We are already experiencing 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, and we have recently been selected to supply pipes for a pipeline to be used in the Northern Lights CO<sub>2</sub> transportation and storage project in Norway.

The Board of Directors has nominated its Vice-Chairman, Germán Curá, to oversee the development and implementation of the Company's strategy for addressing climate change going forward.

# Stakeholder Engagement

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As the effects of the pandemic began to be felt around the world and governments took drastic measures to limit circulation, communications and interaction with our stakeholders underwent a major change. We took advantage of online tools and communications technologies to ensure we maintained contact with our different stakeholder audiences.

## 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. We have deployed a series of measures to gain a thorough understanding of our people's needs, ranging from structured initiatives such as TenarisUniversity's training programs, quarterly feedback check-ins, Employee Opinion and Pulse Surveys, and performance reviews, to more informal instances of regular contact with employees.

During 2020, we stepped up our use of technological tools, with virtual Live Talks and additional Pulse Surveys taking place to reinforce the dialogue between our managers and their teams, and address concerns, pre-empting any signs of problems related to the pandemic.

## Customers

Tenaris's relationship with its customers is one of continuous engagement to understand their priorities and requirements, and with many, we have formed long-term partnerships that have led to significant opportunities for supply chain, technological and digital integration.

Our customers regularly share their experiences with us, including the challenges and difficulties they encounter in the course of their business, a productive exchange which opens up new avenues for investment in technology, research and development to design and improve our range of products and services.

## Suppliers

We see our suppliers as a direct extension of our business and actively seek their involvement to help us manage our environmental, social and governance (ESG) risks.

The disruption caused by the COVID-19 pandemic to supply chain networks overall prompted the need for emergency risk measures.

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We shifted our suppliers workshops and meetings online, sharing the learnings acquired during this process of change with the focus on constructing resilience through technological and operational improvements supported by frequent communications.

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## Investors

We meet regularly with investors to maintain fluid communications, engaging with them in a number of ways through our formal reporting, quarterly conference calls, in-person meetings and shareholders' meeting, as well as anonymous feedback requests. These occasions present opportunities for us and our investors to exchange information and track changing trends and interests, including key ESG aspects.

## Government

We give great importance to the critical role played by government agencies in protecting the environmental, economic and social fabric of society. We work closely with government officials and agencies at all levels to exchange information and points of view aimed at articulating actions able to benefit all stakeholders.

## Communities

We believe that our industrial project can only be sustainable if we grow in tandem with our community. Our mills and operations interact with their local communities in a number of areas, sharing industrial values and the commitment to improving the quality of people's daily lives as a member of the community. The company has a broad portfolio of cultural and technical educational programs in place, and also encourages its employees and their families to take part in volunteering activities.

As the full extent of the pandemic and its impact on our communities began to make itself felt in early 2020, the company rapidly moved its resources to provide support for health infrastructure at a local level.

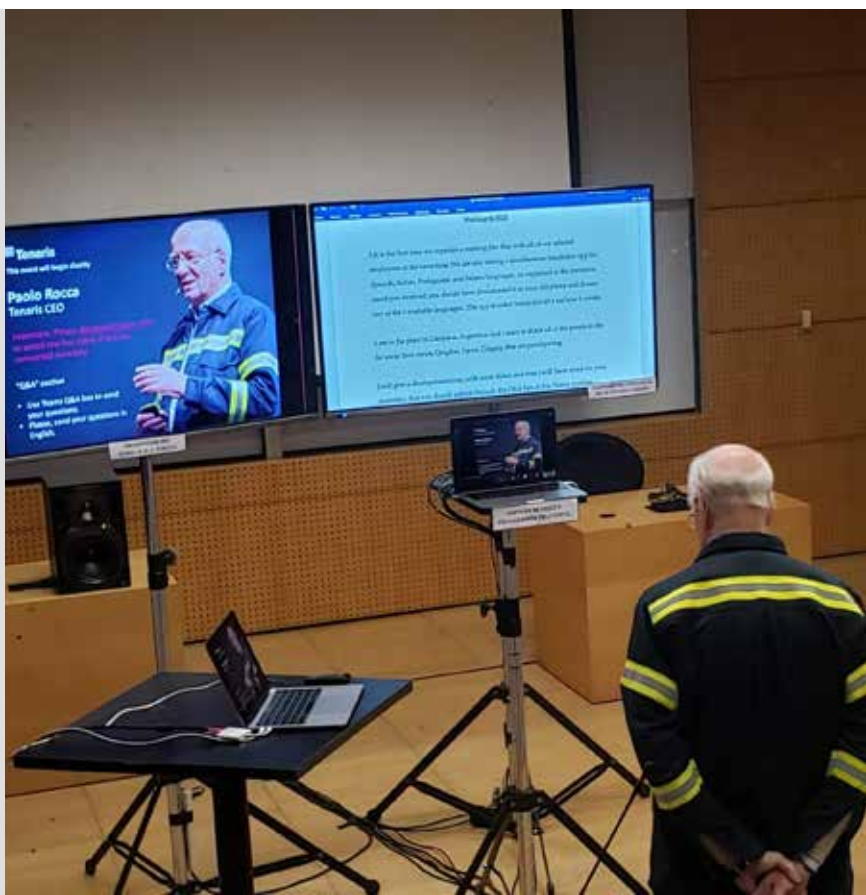
## Industry Associations

As members of several industrial associations, including worldsteel, 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 continue to focus on contributing to responsible sourcing, manufacturing practices and integrated supply chain management, in efforts to reduce the industry's footprint as a whole. By playing an active role in the energy transition, we seek to engage other companies to join the debate and take action, contributing our know-how and experience as members of a several committees and working groups.

## KEEPING IN TOUCH WITH EMPLOYEES AT HOME AND AROUND THE WORLD

During the pandemic, the traditional monthly CEO letters to employees were combined with LiveTalks, a methodology also adopted by Regional Presidents around the world to reach employees as they worked from home, strengthening engagement and allowing our CEO to enjoy closer contact with employees through open and transparent dialogue at a moment when travel is still restricted. The number of events grew exponentially over the months, informing employees of the measures taken by the company to tackle the pandemic and adapt to the market crisis.



# Sustainable Development Goals

## Health and Safety

### → Commitment

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

### → 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, 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 in the context of the COVID-19 pandemic

### → Actions

- Deployed a comprehensive plan to respond to the COVID-19 pandemic
- Health & Safety Leadership Training program and continuous communication at all levels to increase awareness and foster prevention



## Environment

### → Commitment

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

### → Objectives

- Reduce the CO<sub>2</sub> emissions intensity of our operations by 30% from 2018 levels by 2030
- Minimize particulate emissions at our sites
- Foster the circular economy by maximizing scrap recycling and minimizing waste to landfill
- Ensure responsible water management

### → Actions

- Design of programs to achieve CO<sub>2</sub> emissions intensity reduction targets
- Consolidation of plans and investments to improve emissions control, material efficiency and water management
- Introduction of internal carbon price



## 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

### → 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

### → Actions

- Rig Direct® service model enhanced with digital integration initiatives
- Consolidation and development of a product offer for low carbon energy applications
- Digital integration, automation and AI initiatives to enhance production management and improve quality, processes and lead times





## Human Resources

### → Commitment

- To lead with care, providing a safe, flexible working environment built upon wellbeing, 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 its forms

### → Actions

- Promotion of flexible working solutions, training people to adapt to change and new health and safety protocols through enhanced online communications
- Adaptation of training programs for an online environment



## Community Relations

### → Commitment

- To drive inclusive growth and development in the communities where we work and live

### → Objectives

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

### → Actions

- In response to the COVID-19 pandemic, implemented a targeted program to support community medical systems and infrastructure
- Adapted education and cultural programs to an online environment



## Governance, Risk and Compliance

### → Commitment

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

### → 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

### → Actions

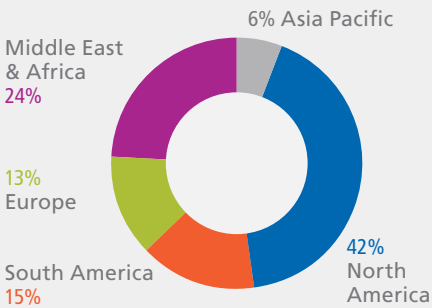
- Board member designated to oversee implementation and development of strategy for climate change and quarterly board discussions scheduled on this subject



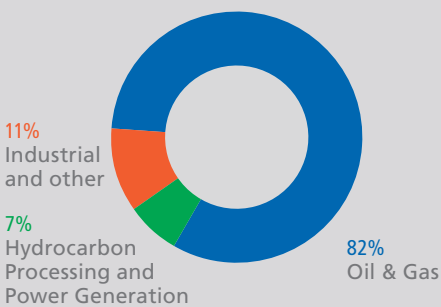
# Global Organization

At December 31, 2020

## SALES BY REGION



## SALES BY MARKET



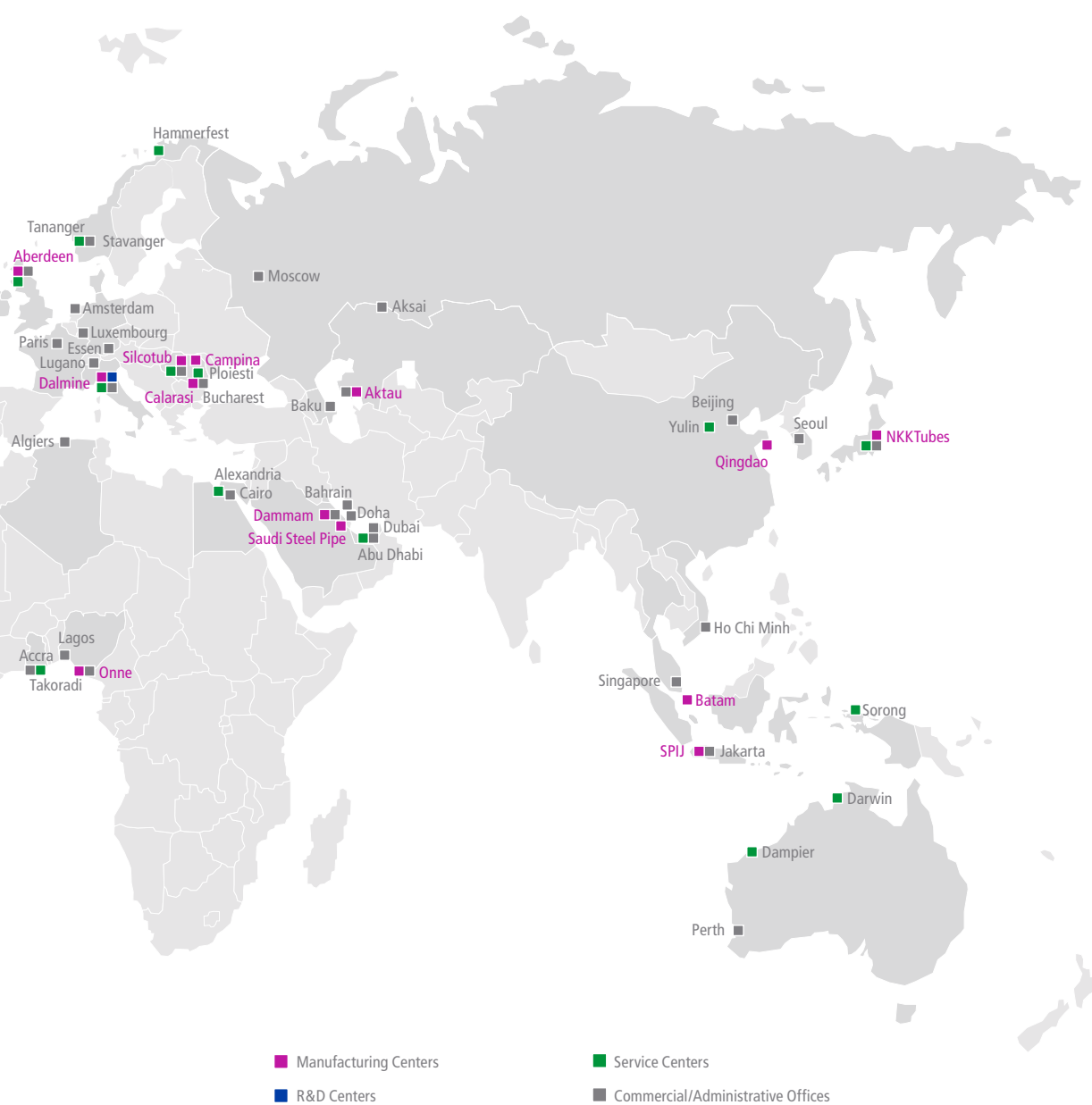
## TOP CUSTOMERS

- ADNOC
- Chevron
- CNOOC
- ConocoPhillips
- ENI
- Equinor
- ExxonMobil
- Kuwait Petroleum Corporation
- Pemex
- Petrobras
- Pioneer Natural Resources
- Qatar Petroleum
- Saudi Aramco
- Shell
- YPF

## SERVICE AND DISTRIBUTION NETWORK IN

**24**  
COUNTRIES





**MANAGEMENT SYSTEMS**

**Integrated Quality**  
ISO 9001:2015

**Health, Safety and Environment**  
ISO 14001 –  
ISO 45001

# Economic Overview

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

Our sales and results in 2020 were severely affected by the COVID-19 pandemic, the measures taken around the world to contain it, the impact this had on global oil demand which caused a collapse in prices and rapid build up of excess inventories, and the consequent drop in investments in drilling activity by our oil and gas customers. While sales held up relatively well in the Eastern Hemisphere regions, they plunged along with drilling activity, in the Americas, where, in Argentina for example, drilling activity was halted for a couple of months.

Overall, sales declined 29% year on year and EBITDA, which included USD 142 million of restructuring charges fell 53% to USD 638 million, reflecting the lower absorption of fixed costs as well as lower sales, while we met our target for a reduction in our fixed cost structure of USD 230 million annualized by the end of the year.

For the year, we recorded a net loss attributable to owners of the parent company of USD 634 million, or (USD 1.07) per ADS. This included an impairment charge of USD 622 million on the carrying value of goodwill and other assets in the U.S., mainly related to the former IPSCO business and welded pipe operations.

Cash flow provided by operating activities amounted to USD 1.5 billion during 2020, as we exceeded our target for reductions in working capital.

## Financial indicators

	2016	2017	2018	2019	2020
<b>In USD millions (unless otherwise stated)</b>					
Net sales	4,294	5,289	7,659	7,294	5,147
Operating income (loss)	(59)	335	872	832	(663)
EBITDA	598	943	1,536	1,372	638
EBITDA margin - %	14%	18%	20%	19%	12%
Net income (loss) attributable to owners of the parent	55	545	876	743	(634)
Capital and reserves attributable to owners of the parent	11,287	11,482	11,783	11,989	11,263
Net cash provided by operating activities	864	(22)	611	1,528	1,520
Capital expenditures	787	558	349	350	193
Research and development expenditures	69	64	63	61	42
Dividends	484	484	484	153	248
Net cash position	1,441	647	485	980	1,085
Return on equity - %	0%	5%	8%	6%	-5%
Return on capital employed - %	-1%	3%	8%	7%	-6%
FCF Margin - % of net sales	2%	-11%	3%	16%	26%



Our innovative PipeTracer® technology integrates digital product data, enabling full pipe traceability by scanning unique pipe reference codes at the rig, reducing manual activities and improving operational safety.

Capital expenditures were also reduced in line with our target to USD 193 million in 2020, compared to the USD 350 million invested in 2019. Free cash flow, which amounted to USD 1.3 billion (26% of revenues) in 2020, exceeded the USD 1.2 billion (16%) we generated in 2019.

Our financial position at December 31, 2020 amounted to a net cash position of USD 1.1 billion (USD 1.7 billion of liquid assets less USD 0.6 billion of debt), after having paid USD 1.0 billion for the acquisition of IPSCO in January 2020.

In June 2020, our shareholders decided to limit the dividend payment for the 2019 fiscal year to the USD 153 million interim distribution made in November 2019. Considering the gradual improvement in quarterly results, the strong balance sheet and the better outlook, the Company's Board of Directors propose, for approval of the annual general shareholders' meeting scheduled to be held on May 3, 2021, the payment of an annual dividend in an aggregate amount of approximately USD 248 million, including the interim dividend of approximately USD 83 million paid in November 2020.

## Economic value generated and distributed in 2020





CAMPAÑA ALIMENTACIÓN  
¡VACUNATE!  
2020

Observo atentamente la...  
y la acción a realizar  
Analizo los riesgos y la...  
más segura de actuar  
Diseño la tarea acorde...  
Actúo con ma...  
Ter

# Health and Safety

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## → Our commitment

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

## → 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, 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 in the context of the COVID-19 pandemic

## → Our actions

Our core values of safety, health, wellbeing and care for the environment are embedded in our mission to achieve sustainable quality and transparency throughout our daily activities. In 2020, 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, including reconditioning our installations to incorporate additional pandemic-related preventive measures.

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, which is constantly adjusted to keep pace with changing circumstances.

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

# 54%

REDUCTION  
LOST TIME INJURY  
FREQUENCY RATE  
COMPARED  
WITH 2017

USD

# 21

MILLION  
INVESTED IN  
HEALTH AND SAFETY  
IN 2020

# 36,000

SAFE HOURS  
HELD

# 7,000

EMPLOYEES  
RECEIVE WEEKLY  
SAFETY UPDATES



The physical and mental health of our people is not only a value in itself, but an essential element to guarantee the sustainability of the company.”



**Paolo Rocca**  
CEO Tenaris

## Essential values for our future

The safety and wellbeing 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](http://www.tenaris.com/qhse)), Tenaris is oriented towards protecting its employees by creating and sustaining a safety culture capable of safeguarding their wellbeing 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, including those posed by the COVID-19 pandemic.

### 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 wellbeing of our employees, whether in the mills performing essential tasks or working from home.

We continue to monitor the evolution of the pandemic, including the progress of the vaccination campaign among employees and the broader community. Our focus is on keeping pace with change, redefining and refining our approach to how we look after our people and our communities.



## SWIFT ACTION TO PREVENT CONTAGION

We implemented company-wide health protocols including the mandatory use of facemasks, faceshields and PPE in certain areas. We set up health check points at the access to our plants and increased disinfection and cleaning routines, also reconfiguring transport and common areas to incorporate safe distancing measures. We supported those working from home with frequent updates and guidelines about the virus and safety procedures, as well as tips for self-care.





Stringent disinfection and cleaning routines were introduced as part of comprehensive health and safety protocols to curb the spread of COVID-19 at those of our plants performing essential tasks.

We are currently studying how best to contribute to ensuring vaccine availability and distribution, particularly among the population most at risk.

Many lessons have been learned over the course of the year, particularly about the strength of interpersonal relationships in teamwork, which have been vital in helping people to cope with isolation and remote working.

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**We are changing our way of working to reinforce teamwork, increasing flexibility around the different situations of our employees, and adapting our workspaces to offer the safest way for people to return to the office.**

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### Transformation for life

In 2018, the Company launched its Three-year Industrial Transformation Plan, centered on a strategy to establish a resilient safety culture focused on 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.

Putting safety at the heart of industrial growth and transformation has meant investing efforts in training and communications, including a Safety Leadership course held 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 the population of Shift Leaders, positively impacting safety indicators.

One of our most relevant achievements during 2020 was the consolidation of the positive trend achieved in 2019, despite the changes in the market context which led to the Company's reorganization. As a result of this, in 2020, our LTIFR performance was close to 1 for the second year running, considering own employees and contractors at all Tenaris sites.



Throughout 2020, we strengthened our health and safety culture, leveraging on communication and leadership. We also implemented preventive measures against the coronavirus disease worldwide to protect the health of all our people.”



**Antonio Caprera**  
Chief Industrial Officer

This achievement confirms that our actions are going in the right direction, in alignment with industry reference standards according to the World Steel Association.

As most incidents and accidents are the result of unsafe behavior when executing work-related tasks, we are using the information recorded in the IT system tracking accidents, incidents, unsafe conditions and behaviors as input for company-wide communications campaigns. These include the weekly mailing of infographics about specific incidents, translated into 10 languages, to 7,000 employees around the world.

The new approach to safety has also involved redesigning the Working Instructions detailing the steps making up each task undertaken at the mill. We have reviewed over 1,800 risk analyses all over the world, increasing operator involvement and adding new features such as critical element checklists. With the Engineering department, we have focused initiatives on high impact areas, principally to upgrade steel shop exhaust systems and revamp overhead cranes.

We have actively taken part in benchmarking activities with other industrial companies, and have been recognized on several occasions for groundbreaking safety-oriented initiatives and concrete results by the World Steel Association (worldsteel). In 2020, worldsteel recognized Tenaris for its “Communications Routines” within the “Safety and Health Recognition Program”.

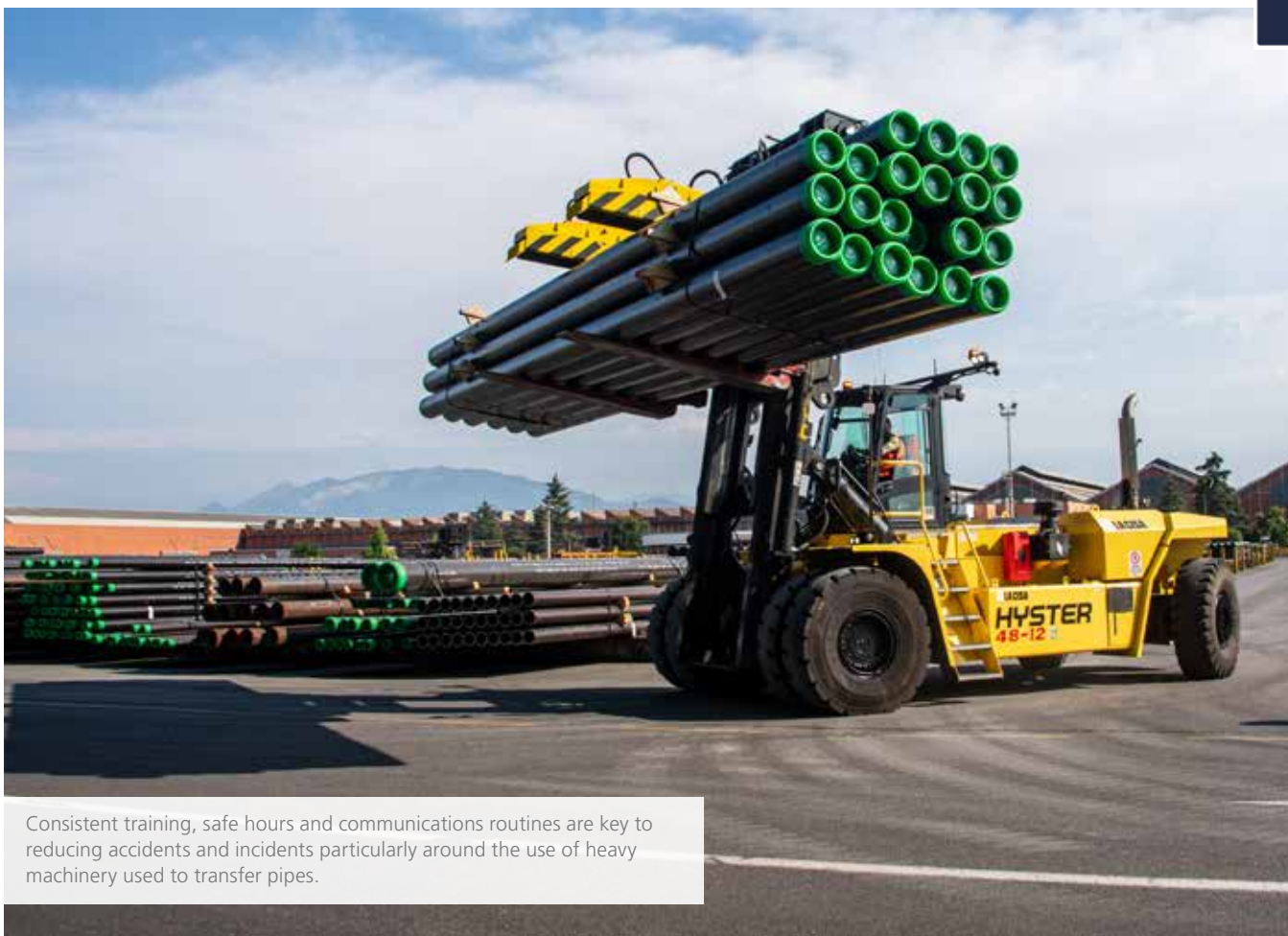
Aimed at enhancing safety in the workplace, these were designed to create a systematic, prepared, and structured face-to-face communications process reaching every employee at all levels of the organization to improve safety awareness, knowledge, and behavior.

Additionally, we introduced a new process to manage multi-hazard risks resulting from interferences in the manufacturing and logistics processes.

We are firmly committed to achieving a reduction in the occurrence of high severity incidents and have established a comprehensive preventive program aimed at leveraging the hierarchy of risk controls which range from engineering factors to behavior control measures.

The principal severe hazards that present health and safety risks involve handling materials using overhead cranes and heavy vehicles. With this in mind, we have designed a series of objectives and targets, bolstered by detailed plans for implementation at each of our sites and designated dedicated local task forces to follow through.

The plans focus on tackling these hazards by drawing up priorities such as safety devices, involving minimum requirements, preventive maintenance routines, shift checklists and an employee certification program. As for 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 been introduced to manage the risks arising from interferences in manufacturing and logistics processes.



Consistent training, safe hours and communications routines are key to reducing accidents and incidents particularly around the use of heavy machinery used to transfer pipes.

We include all contractors working at our sites in the Tenaris Safety Management System to ensure our prevention programs are truly effective.

In 2020, we enforced the Contractor Management Process by assigning a key role to middle-management in the suppliers evaluation.

The systematic communication of safety issues on the shop floor plays a major role in maintaining high levels of safety awareness and alertness.

As members of the World Steel Association's safety groups with other leading steel producing companies, we are constantly enhancing guidelines for safety management in different areas (e.g., Contractors Safety Management).

During 2020, we successfully completed the transition for the health and safety management system, from OHSAS 18001 to the ISO 45001 standard, while maintaining the ISO 14001 certification. The number of production sites operating under a certified management system fell to 80% due to the incorporation of IPSCO sites which were then shut down during 2020; however, with the exclusion of these, the numbers remain within the same range of 94% as was reported in 2019.

We continue to develop the Process Safety Management program focusing on design and engineering at facilities, equipment maintenance, ensuring effective alarms and control points, and reinforcing procedures and training, a disciplined approach to personnel certification. This program dovetails with another on Catastrophic Risk Analysis to detect and prevent unexpected events with a serious impact on our people, environment and business continuity.

## Health and wellbeing

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 wellbeing.

The Health Management System (HMS) provides for periodic workplace monitoring and risk analysis to evaluate and control a range of activity-related factors with the potential of affecting employee health, including chemical, biological, physical, ergonomic and psychological risks.

In February 2020, as pandemic-related measures began to be introduced around the world, we set up a crisis management team to draw up a global strategy of actions aimed at protecting personnel working at all of our sites, which was followed up to gauge effectiveness and make the necessary adjustments.

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A key aspect of the strategy was the corporate communication and awareness-raising campaign designed to ensure all employees were fully informed and trained to use the health, safety and wellbeing protocols introduced.

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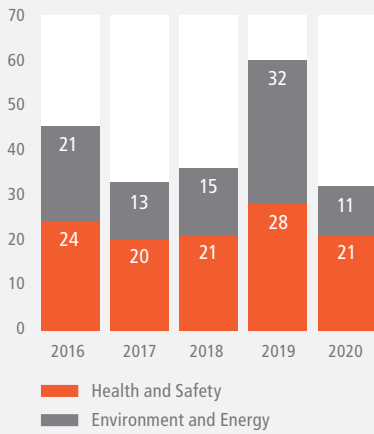
The central idea of the communications campaign was to encourage people to take the right measures in looking after themselves, their families and co-workers, and included guidelines on health protocols, the use of mandatory protective equipment and remote working.

In broader terms, Communications also played a vital role in transmitting reassurance and support by keeping employees working at home informed with regular and frequent bulletins, news and advice, as well as videos and a comprehensive social media campaign featuring infographics, animated videos and posters.

# Key indicators

## Investment in Health, Safety and Environment

In USD million

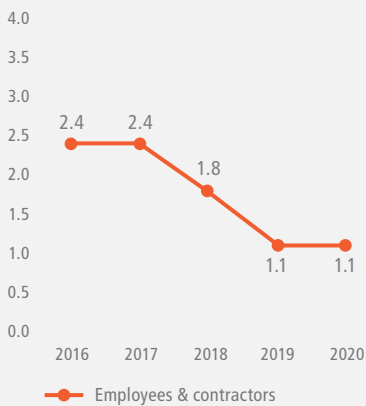


## Injury Frequency Rate



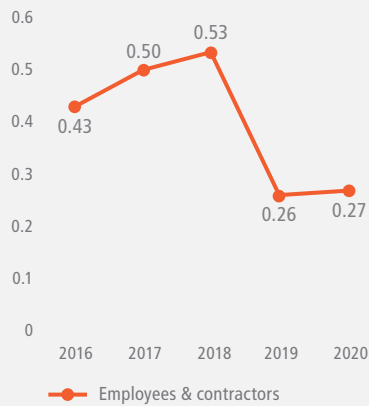
**Methodology:** Number of accidents with and without lost days (not including First Aid) per million hours worked.

## Lost Time Injury Frequency Rate



**Methodology:** Number of accidents with lost days per million hours worked.

## Major Injury Frequency Rate



**Methodology:** Number of major accidents (excluding fatalities) per million hours worked.



# Environment

## → 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 bring benefits that are both economic and environmental, from materials recycling as part of the circular economy, to harnessing cleaner energy. Achieving greater energy and material efficiency, increasing scrap recycling and employing natural gas as a bridge fuel on the way to renewables and new technologies, such as hydrogen, are best achieved with an ongoing industry commitment to working together.

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 to add their efforts to achieve a cleaner future. Tenaris has pledged to achieve a 30% reduction in its CO<sub>2</sub> emissions intensity rate by 2030, considering scopes 1, 2 and 3 emissions compared with 2018 levels. This medium-term target forms part of a broader long-term objective of achieving carbon neutrality.

Tenaris, as a member of the Techint Group, has the opportunity to share knowledge and best practices, as well as access to technological developments, with its affiliated companies working in the energy and steel industries.

# 30%

BY 2030  
INTENSITY REDUCTION  
TARGET IN CO<sub>2</sub> TN / TN STEEL

# 10%

REDUCTION  
IN TN CO<sub>2</sub> / TN STEEL  
IN 4 STEELMAKING FACILITIES  
VS 2019

# 82%

RECYCLING  
CONTENT IN  
OUR STEEL

# 98.9%

MATERIAL  
EFFICIENCY  
AT STEELMAKING  
SITES



We are setting the path for our actions to decarbonize our products and process as part of our contribution to achieving a carbon neutral economy.”



**Carolina Bengochea**  
Global Environmental  
Director

## Energy and climate action

### → Our commitment

To reduce the intensity and overall level of our CO<sub>2</sub> emissions by using energy resources efficiently, increasing the use of scrap and implementing best available technologies. We are seeking to integrate energy transition and digital transformation initiatives using carbon-efficient sources of energy, drawing on the lessons learned from this year's crisis.

### → Our objectives

- Increase the efficiency of energy use
- Reduce the intensity of CO<sub>2</sub> emissions by implementing actions, ranging from increasing scrap use and clean electricity, to the use of hydrogen and best available technologies for greater efficiency
- Provide our customers with products and services which contribute to minimizing emission levels

### → Our actions

World steel production accounts for around 8% of greenhouse gas emissions stemming from the use of fossil fuels, making the reduction of CO<sub>2</sub> emissions an urgent priority. Aware of how steel contributes to global CO<sub>2</sub> 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 increasing scrap use in steelmaking processes, and evaluating alternatives to cut emissions by employing innovative technologies at our sites.

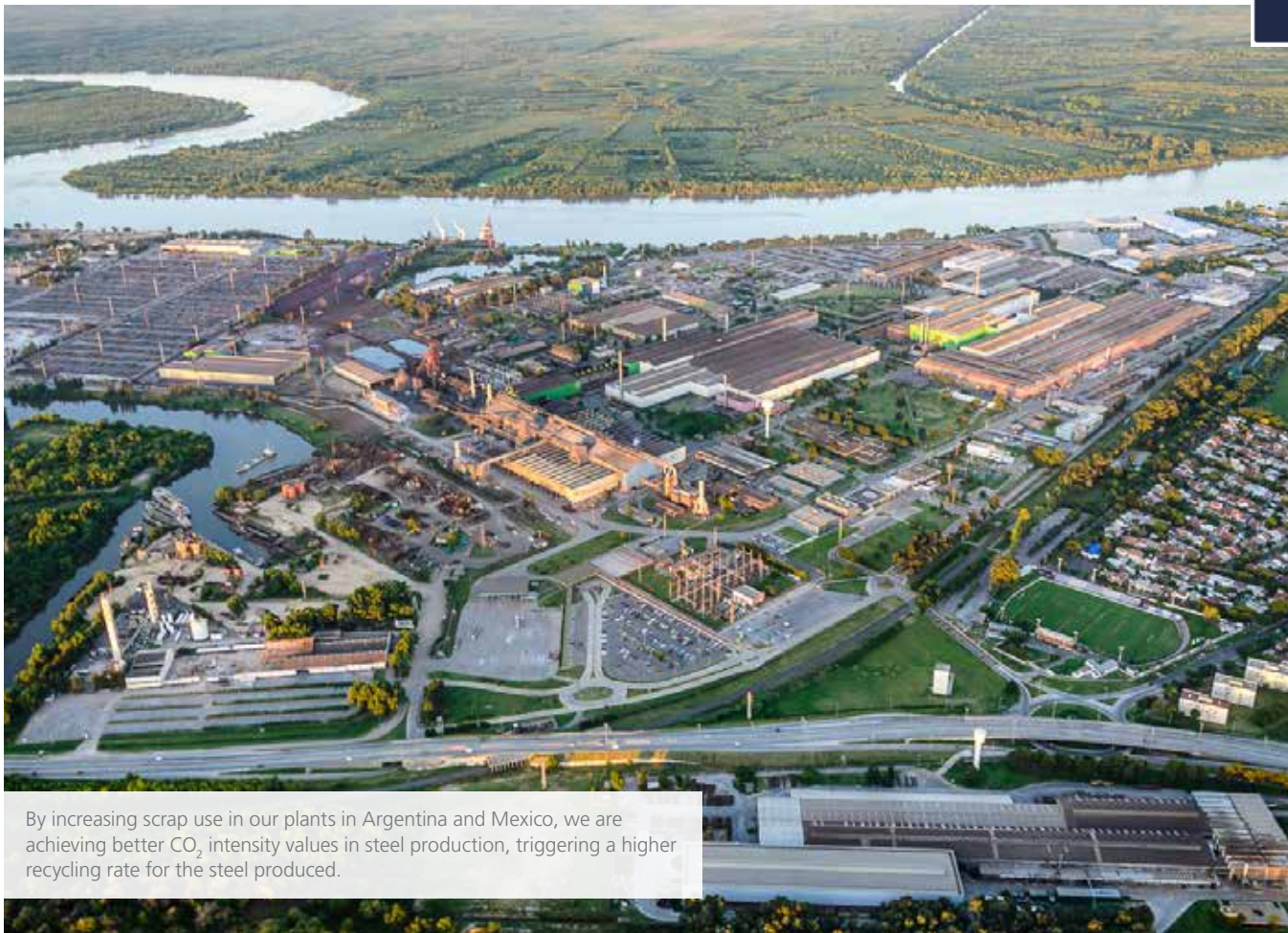
Most of our steel is based on recycled steel, currently the technology producing the lowest emissions for steel production. We have one natural gas-based iron making direct reduction plant in Argentina. Since we do not produce steel using coal-based blast furnaces, the emissions intensity of our steel 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.

In 2020, we achieved recycling content levels of 82% in our steel by using electric arc furnaces to recycle steel scrap. As a result of the market context, we were able to increase scrap use in our plants in Mexico and Argentina, leading to better CO<sub>2</sub> intensity values in steel production. Reduced manufacturing levels provided the opportunity to source more scrap from our sites in Argentina and Mexico, triggering a higher recycling rate for the steel produced.

### Reducing CO<sub>2</sub> emissions

We are evaluating numerous initiatives to reduce CO<sub>2</sub> 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 low carbon electricity sources for lowering Scope 2 emissions. We are also looking at technology upgrades to increase efficiency or decrease energy requirements, and ways of incorporating hydrogen in different processes, as well as carbon capture use or storage techniques.





By increasing scrap use in our plants in Argentina and Mexico, we are achieving better CO<sub>2</sub> intensity values in steel production, triggering a higher recycling rate for the steel produced.

In Italy, our Dalmine mill has been working with our affiliates Tenova and Techint Engineering & Construction on the “Dalmine Zero Emissions” project to integrate green hydrogen in the steel production process, with a view to incorporating it in other production processes as technology advances. Dalmine, SNAM and Edison have also signed a letter of intent to collaborate on a joint steel decarbonization project and are currently pursuing financing sources.

We continue to work closely with the World Steel Association, and last year were recognized by the worldsteel’s Climate Action Program for complying with CO<sub>2</sub> emissions reporting requirements over the last ten years, essential input for the data collection program integral to the steel industry’s global approach to climate change.

We calculate the CO<sub>2</sub> emissions for our steel sites with steelmaking operations using worldsteel methodology combined with local emissions factors for electricity, reflecting local conditions in the countries where we operate. The CO<sub>2</sub> emissions intensity from our steelmaking sites, which also account for seamless

pipe production, was 1.1 tn CO<sub>2</sub> /tn of cast steel in 2020, almost 10% lower than 2019, considering the three scopes. This is well below the global steelmaking weighted average reported by the World Steel Association. Total emissions amounted to 1.9 million tons of CO<sub>2</sub>, 45% down from 2019. Cast steel was reduced by 38% in the same period, reflecting the significant impact of the pandemic on our operations.

We are also reporting the CO<sub>2</sub> emissions for this year regarding all our operating tubular sites, including steelmaking, seamless and welded pipe production and processing, considering the three scopes. We are using a similar methodology which includes steel bars purchased from third parties within Scope 3 emissions together with other raw material used for the steelmaking process. We consider that this measurement more accurately reflects the full scope of our emissions and is the one against which we have set our medium-term target for a 30% reduction. In 2018, our emissions measured in this way showed an intensity of 1.4 tn CO<sub>2</sub>/tn steel which was reduced to 1.3 tn CO<sub>2</sub>/tn steel in 2020.



The Dalmine Zero Emissions project is an opportunity for us to work with qualified partners to initiate the energy transition process for the Dalmine plant, placing ourselves at the forefront of sustainability in the steel sector.”



**Michele Della Briotta**  
President, Tenaris Europe

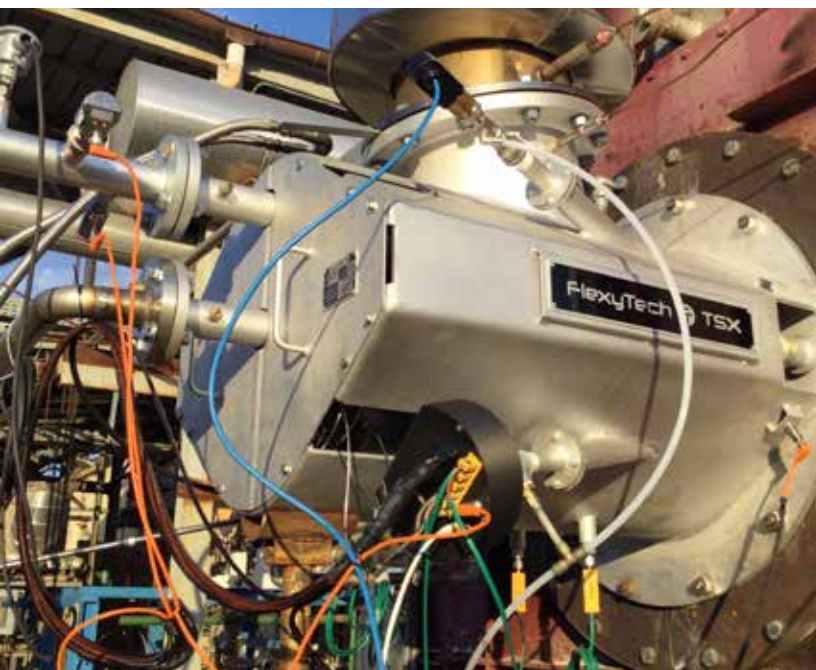
The reduction in intensity was influenced by many factors, including a higher scrap percentage at Siderca and Tamsa. These values include Scope 1 direct, Scope 2 related to electricity, and Scope 3 related to emissions from raw materials used. We report our indicators in terms of CO<sub>2</sub> which account for 93% of all steel industry greenhouse gas emissions, according to worldsteel.

In Mexico, our new combined cycle natural gas-fired power plant began operations in 2017, with a lower emission factor than the national system, and is supplying almost all of the electricity needs of our Tamsa site. In Argentina, although our gas-fired combined cycle power plant was temporarily stopped in 2019, for comparative purposes we maintained the emission factor for this plant rather than the local electricity supply, which has a lower emission factor due to Argentina’s low-carbon energy mix based on gas, hydroelectric and nuclear.

In Italy, our gas-fired combined cycle plant provides steam for district heating in the local community in addition to electricity to run our Dalmine facility, also selling some electricity to the local grid.

### 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; Dalmine line pipe solutions, and our OCTG seamless pipes from Siderca, Dalmine, Silcotub and Tamsa. The Tenaris EPD for seamless OCTG pipes was the first of its kind to be published.



## Energy efficient technology

The advanced flameless burner technology designed by Tenova offers dramatic reductions in NOx emissions as well as significant energy savings. As the technological heart of the industrial furnace, the regenerative burner works with a diluted mix of air and natural gas, guaranteeing higher combustion uniformity. It sets a new absolute standard in terms of operating performance as energy efficiency and reduced emissions are converging goals guiding new investment choices.

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 CO<sub>2</sub> 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.

## INTEGRATING HYDROGEN FOR A GREENER OPERATION

Dalmine Zero Emissions is the first industrial-scale initiative in Italy to decarbonize the steel sector by introducing green hydrogen into specific production processes as from the electric arc furnace stage. The project aims to generate hydrogen and oxygen through a 20 MW electrolyzer installed at Dalmine, adapting the steelmaking process to use green hydrogen instead of natural gas, significantly reducing

steel direct emissions by up to 73%. The initiative also envisages the construction of a storage site to accumulate hydrogen at high pressure, and aims to deploy oxygen produced locally by electrolysis within the fusion process. Dalmine Zero Emissions is an opportunity for Tenaris to partner with its peers in industry to drive the energy transition process for the Dalmine plant, placing the initiative at the forefront of sustainability in the steel sector.





New efficiencies in the Finishing Line coating booth at TenarisBayCity have optimized pipe varnish and cut waste. The Thermal Oxidizer destroys 90% of volatile compound emissions contributing to a more sustainable process.

## Air quality

### → Our commitment

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

### → 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

### → Our actions

In addition to CO<sub>2</sub> emissions, the steelmaking process generates emissions from particulate matter and other pollutants that can be inimical to air quality and public health: we have thus established corporate procedures setting strict limits on stack emissions and monitoring requirements. Internal limits have been defined according to the best technologies available to improve processes beyond local legal compliance levels, as not all countries where we produce have the same requirements.

### Reducing emissions

We have expanded our investment in the control of particulate emissions over the last few years, upgrading systems throughout our sites to achieve the required levels of emissions according to the highest standards and best available technologies. In 2019, we invested USD 27 million in our Tamsa facility in Mexico to upgrade the capture and treatment system for steel shop emissions, adding new filters and enhanced extraction capabilities.

Our Siderca facility in Argentina is pursuing a similar project to install new filters and improve extraction capabilities with a CAPEX of USD 18 million; however, after the completion of the first phase, it encountered delays due to the effects of the pandemic.

The continuous monitoring of our steel shop stacks shows that total particulate material emissions have fallen consistently over the last few years, thanks to improvements in the control of treatment systems, and to our ongoing investment program. Values fell from 100 g/ton of product in 2016 to 33 g/ton in 2019 and continue to drop to 11 g/ton product as a weighted average value for our four sites. Taking a conservative approach, we consider these values to be representative for PM10 and PM2.5 emissions as well. These achievements bear witness to our commitment to reduce our environmental footprint, ensuring healthy working conditions and cleaner air for both employees and the communities where we operate. We also routinely monitor other pollutants in our steelmaking processes to verify compliance with internal and legal applicable requirements.

Our Bay City seamless pipe mill in Texas was designed to achieve the most stringent environmental performance standards in terms of nitrogen oxide (NOx) air emissions. Our new furnaces are equipped with the best available techniques (BAT) to improve our performance in terms of natural gas consumption and NOx emissions. We have developed internal criteria according to BAT requirements to ensure values below 150 mg/Nm<sup>3</sup> on their emissions during normal operating conditions.

The investment program to reduce volatile organic compounds (VOC) emissions recorded its first results following the modification of two varnishing lines in Argentina, where we moved from solvent to water-based products as part of a USD 2 million project. Bay City is operating a thermal oxidizer for its water-based varnishing line after a USD 1.2 million emissions-reducing investment to further reduce VOC. The revamped lines for Dopeless® products, including pipes and couplings at Siderca, have been fitted with a scrubber abatement system and a post-combustion chamber for couplings in order to reduce the VOC content.

## Circularity and material efficiency

### → Our commitment

To implement circular economy concepts throughout our industrial system.

### → 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

### → 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<sub>2</sub> 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 CO<sub>2</sub> 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, Siderca, Tamsa and Silcotub facilities has a recycled content of 82% calculated according to ISO 14021 standards, thanks to the use of electric arc furnaces (EAF), where recycled scrap maintains its steel quality characteristics.

Recycled content value is a weighted average taken for the four sites based on steel bar production, with higher values achieved by our European sites Dalmine and Silcotub.

Tamsa combines hot briquetted iron with scrap, while Siderca combines locally-sourced steel scrap with direct reduced iron produced on site using natural gas to provide the metal charge necessary for operations. Differences in processes and raw materials arise from local availability and scrap market conditions. During 2020, we consumed 1,675,000 tons of recycled steel scrap at our plants.

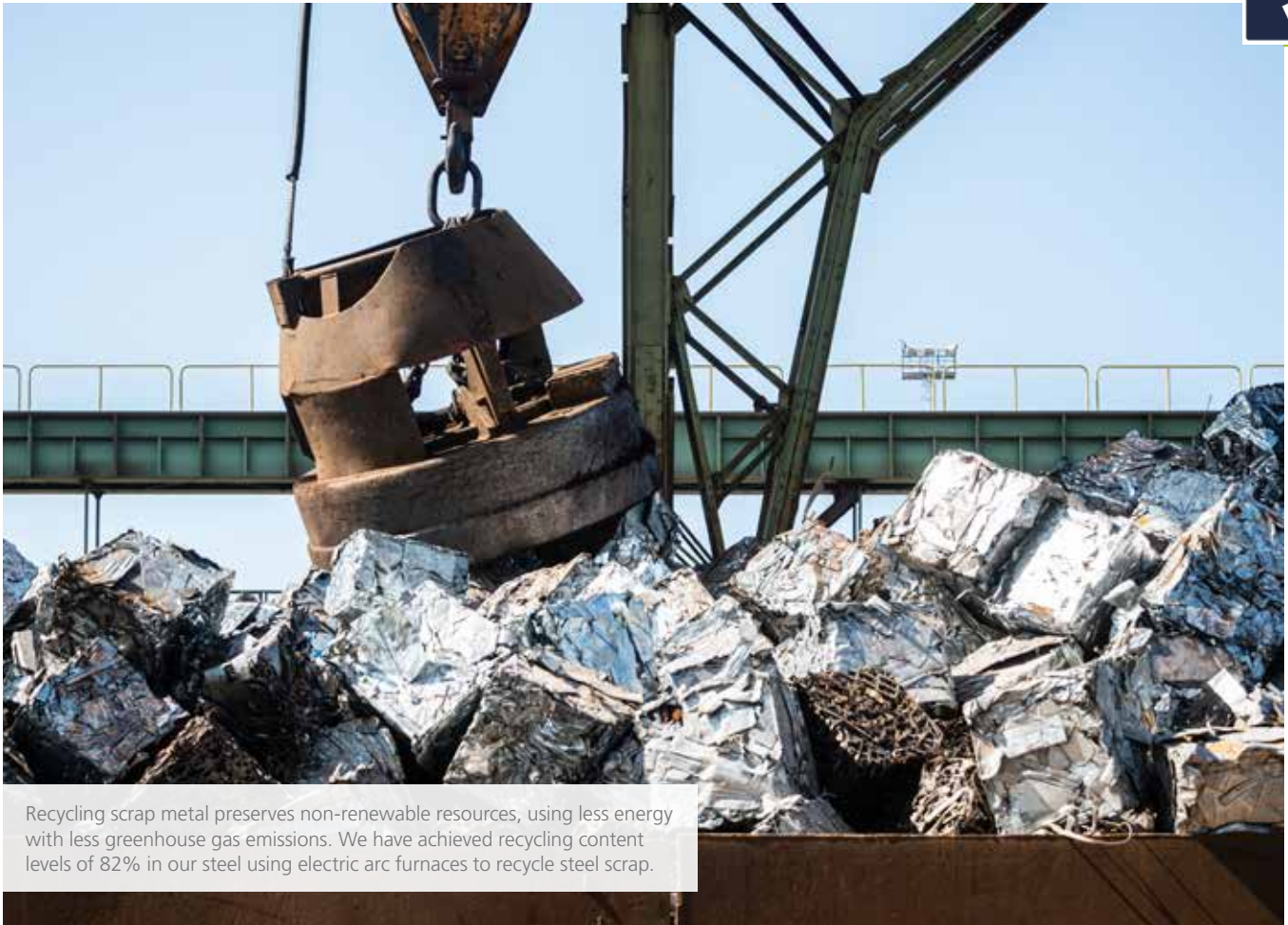
#### Material management

Our level of material efficiency reached 98.9% in 2020 for our steel sites, which compares with a steel industry average of 97.5% reported by worldsteel for 2019.

We reuse and recycle residue and by-products to cut waste: during 2020, we sent 8.3% of all residues produced to landfill, a drop of almost 20% compared with 2019. Co-product recycling increased this year as a result of lower production levels, and a greater market available for recycling routes. This variation is encouraging and follows on from last year, despite the difficult circumstances which arose in 2020. 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 steel companies.

Our site in Silcotub has joined an EU-financed project to evaluate and test different residues and alternative raw materials to feed the electric arc furnace. The project will be ongoing for the next four years with different partners, looking to find ways to further work with the EAF to achieve circular, low-emission steel.

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, to maintaining thread protectors by recycling, thus increasing opportunities for circularity in our industry.



Recycling scrap metal preserves non-renewable resources, using less energy with less greenhouse gas emissions. We have achieved recycling content levels of 82% in our steel using electric arc furnaces to recycle steel scrap.

## Recycling

**1,675,000**

**TONS OF SCRAP**  
recycled to produce  
new steel

**16,000**

**TONS OF IRON**  
based products  
from DRI plant

MORE THAN

**260,000**

**TONS OF SLAG**  
recycled

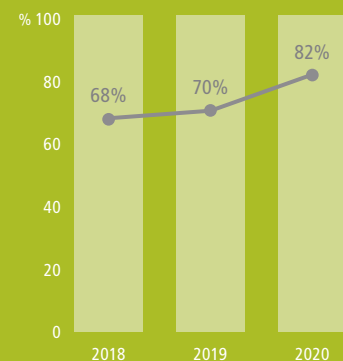
**60,000**

**TONS OF SCALE**  
recycled

**5,800**

**TONS OF WOOD**  
reused or recycled  
for different  
purposes

## RECYCLING CONTENT IN OUR STEEL



## EXAMPLES OF WASTE REDUCTION

At Costa Volpino in Italy, reusing high temperature fumes dries out sludge from the waste water treatment plant, compacting the quantity sent to disposal by 70%.

We are cutting the consumption of hydraulic oil at our mills, which not only contributes to minimizing spills and reducing oil contaminated waste, but also plays a vital role in raising the awareness of our maintenance teams about the need for fast intervention to minimize oil losses. Since 2017, our consumption of hydraulic oil per ton of pipe has been reduced by 25%.

Tenaris has developed a project to reduce the consumption of wood used for separating pipes during internal storage and for transportation to our customers.

In addition to our current internal reduction and reuse programs, we are also replacing wood with plastic dunnage at some sites, due to its durability, ease of reuse, and the fact that it means we can reduce wood consumption.

Another advantage is that when plastic dunnage is damaged or broken, it can be recycled to produce the same or similar products. In Mexico in the last three years, the replacement of wood by dunnage for a single pipe transportation route has reduced wood consumption by 4,600 tons, and the project is now being replicated in other locations where feasible.





## Water management

### → Our commitment

To ensure the responsible management of water.

### → 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

### → 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 2020, 63% of the water we used was sourced from surface water and 30% from subsurface, with the remainder from local networks. These percentages are slightly different from usual numbers due to the high variability in production levels at our sites.

At Siderca in Argentina, around 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.

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Our Bay City mill in the U.S. works with a 95% water recycling rate system, while blowdown is treated at the local wastewater treatment facility. The same concept is applied at our new seamless pipe processing facility in Colombia where used water is recycled with no industrial discharge.

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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.

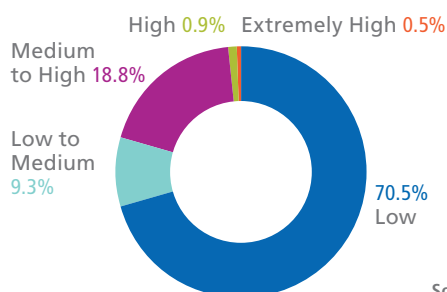
### Improving use and management

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% 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, while in medium to high stress areas, this is 19% and around 80% in low and low to medium stress areas.

Most of our more intensive water-use facilities lie in areas of low or medium water stress risk, according to the World Resources Institute’s Aqueduct global water risk mapping tool.

### WATER RISK LEVELS ACROSS TENARIS’S LOCATIONS



Source: Aqueduct

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, since 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.

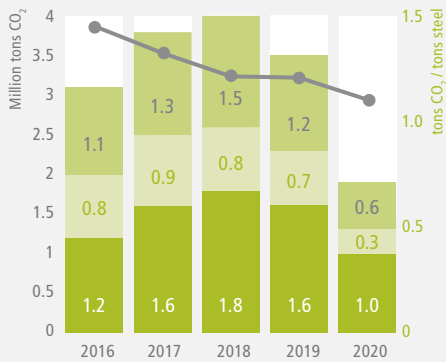


### BIODIVERSITY: STEEL PIPE CONTRIBUTES TO “YAGUARETE” CONSERVATION PROJECT IN ARGENTINA

The Rewilding Argentina foundation is working to conserve and restore local fauna in the “Esteros del Ibera” reserve in the Northeast Argentina. Rewilding Argentina is part of the Tompkins Conservation organization. The Foundation’s work was ranked by the National Geographic Society among the top seven best projects of its kind, a successful model of conservation, restoration and local economic development, in a year where the local theme for the UN Environment Day was Biodiversity. The Techint Group, and particularly Tenaris, Ternium and Tecpetrol, have contributed to the project by donating and transporting steel pipes to build corrals as part of the initiative to reintroduce the local jaguar after 70 years of extinction in this part of the world, culminating in the release of the first two jaguars into the wild.

# Key indicators

**CO<sub>2</sub> emissions:**  
Sites with steel shops

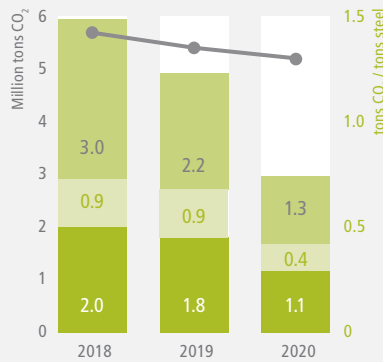


**LEFT AXIS:**  
■ Scope 1 tons CO<sub>2</sub>  
■ Scope 2 tons CO<sub>2</sub>  
■ Scope 3 tons CO<sub>2</sub>  
**RIGHT AXIS:**  
—●— Intensity tons CO<sub>2</sub> / tons steel

**Methodology:** worldsteel using electricity local emissions factors  
**Sites covered:** Dalmine, Siderca, Silcotub, Tamsa

**Scope 1:** direct emissions  
**Scope 2:** indirect emissions related to electricity  
**Scope 3:** indirect emissions related to raw materials and steel use

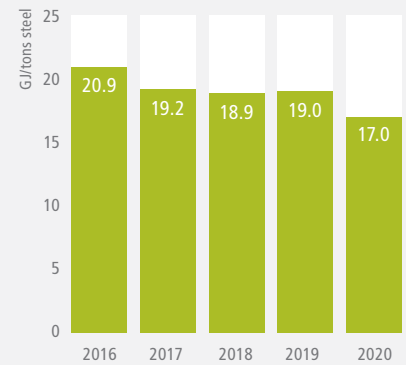
**CO<sub>2</sub> emissions:**  
Tubular production and processing sites (including steel shops)



**LEFT AXIS:**  
■ Scope 1 tons CO<sub>2</sub>  
■ Scope 2 tons CO<sub>2</sub>  
■ Scope 3 tons CO<sub>2</sub>  
**RIGHT AXIS:**  
—●— Intensity tons CO<sub>2</sub> / tons steel

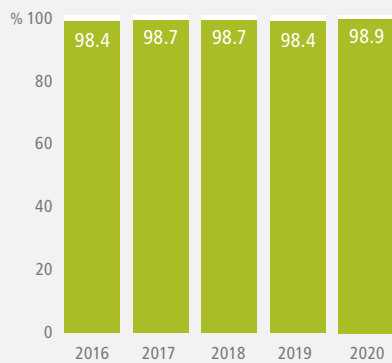
**Sites covered:** Tubular production and processing facilities excluding closed sites

**Energy intensity:**  
Sites with steel shops



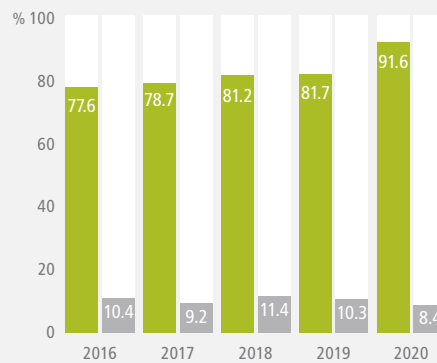
**Methodology:** worldsteel  
**Sites covered:** Dalmine, Siderca, Silcotub, Tamsa

**Material efficiency:**  
Sites with steel shops



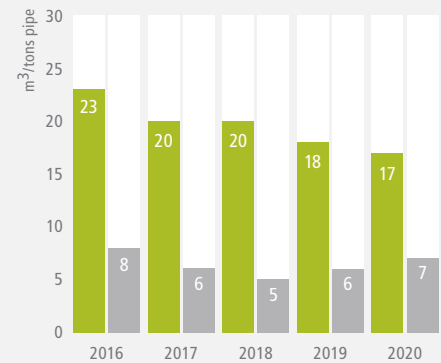
**Methodology:** worldsteel  
**Sites covered:** Dalmine, Siderca, Silcotub, Tamsa

**Residues & co-products reuse or recycling:** all sites



■ Reused / recycled materials  
■ Waste disposal

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



**LEFT AXIS:**  
■ Water withdrawal intensity  
■ Water withdrawal excluding Siderca



# Innovation and the Value Chain

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## → 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.

## → Our objectives

- Develop and improve our product and service portfolio 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

## → 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 2020, we invested USD 42 million in R&D, totaling USD 299 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 adapt existing products in order to achieve optimized and leaner operations, using digital integration, automation and AI initiatives to enhance production management and improve quality processes and lead times. We are also consolidating and developing a product offer for low-carbon energy applications. Furthermore, we are developing tubulars for industrial uses to perform at higher temperatures, high-resistance steels for air bags; better performing 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

42

MILLION  
INVESTMENT  
IN R&D IN 2020

305

RIGS  
SUPPLIED UNDER THE  
RIG DIRECT® MODEL  
WORLDWIDE IN  
DECEMBER 2020

240

PEOPLE  
WORKING  
IN R&D

4,824

PEOPLE BENEFITED  
FROM THE PROPYMES  
PROGRAM IN 2020



We are working with customers and research institutions around the world to develop state-of-the-art products required for the storage and transportation of hydrogen and carbon dioxide.”



**Marcelo Ramos**  
Chief Technology Officer

### Working on 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.

These projects include an in-depth study of the interaction between multiple steel grades manufactured using different processes with hydrogen and/or CO<sub>2</sub>, in varying conditions of purity, pressure and temperature. A similar approach is being taken to casing and tubing connections and coatings.

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Tenaris is working with key Joint Industrial Programs (JIPS) to develop hydrogen-related technologies, such as Hyline in Norway and HyBlend™ in the U.S.

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We are also envisaging several projects to be launched in close collaboration with key market players and research institutions in the energy sector. For example, in Italy, we have partnered with Edison and Snam to work on the decarbonization of Dalmine, our seamless pipe mill in Bergamo. We are also collaborating with leading institutions such as Sandia National Labs in the U.S. and Rina in Italy.

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.

### Customer integration

Over the last years, we have been working to increase efficiency in the energy supply chain through our Rig Direct® service model. By partnering with our customers throughout every step of their drilling operations, we can reduce repetitive operations, waste and costs through an integrated service solution that covers technical advice for product selection, collaborative demand and supply planning, efficient supply chain management and on-site technical assistance, contributing to simpler and more sustainable operations.

Tenaris has now taken this further with digital integration, developing and deploying digital tools to streamline processes for our customers while increasing operational safety, efficiency and reliability. Customers can access these tools in the Digital Box section on our website.

In line with the digital transformation we have embraced for our whole business, we are developing digital tools to support our customers’ decision-making processes in complex applications, such as casing installations in shales, and drilling while casing. These real-time tools are based on the smart use of the large amount of data available at the rig site, plus a combination of especially developed sensors complemented by a thorough understanding of product performance in extremely complex load regimes.



The company's digital transformation process are fundamentally shifting how we operate and deliver value to customers, involving cultural changes and challenges to the status quo.

Through the Rig Direct® Portal, Tenaris has upgraded its business model with a digital commerce platform that expedites transactions and shares critical information. This digital platform, developed in-house and based on .Net technology, connects Tenaris and its customers in a dedicated digital space, covering everything from invoicing to product dispatch management and tracking trucks from Tenaris service yards to customer rig sites. Initially launched for the U.S. market, the portal is now also available to Tenaris customers in Argentina, Colombia and Mexico.

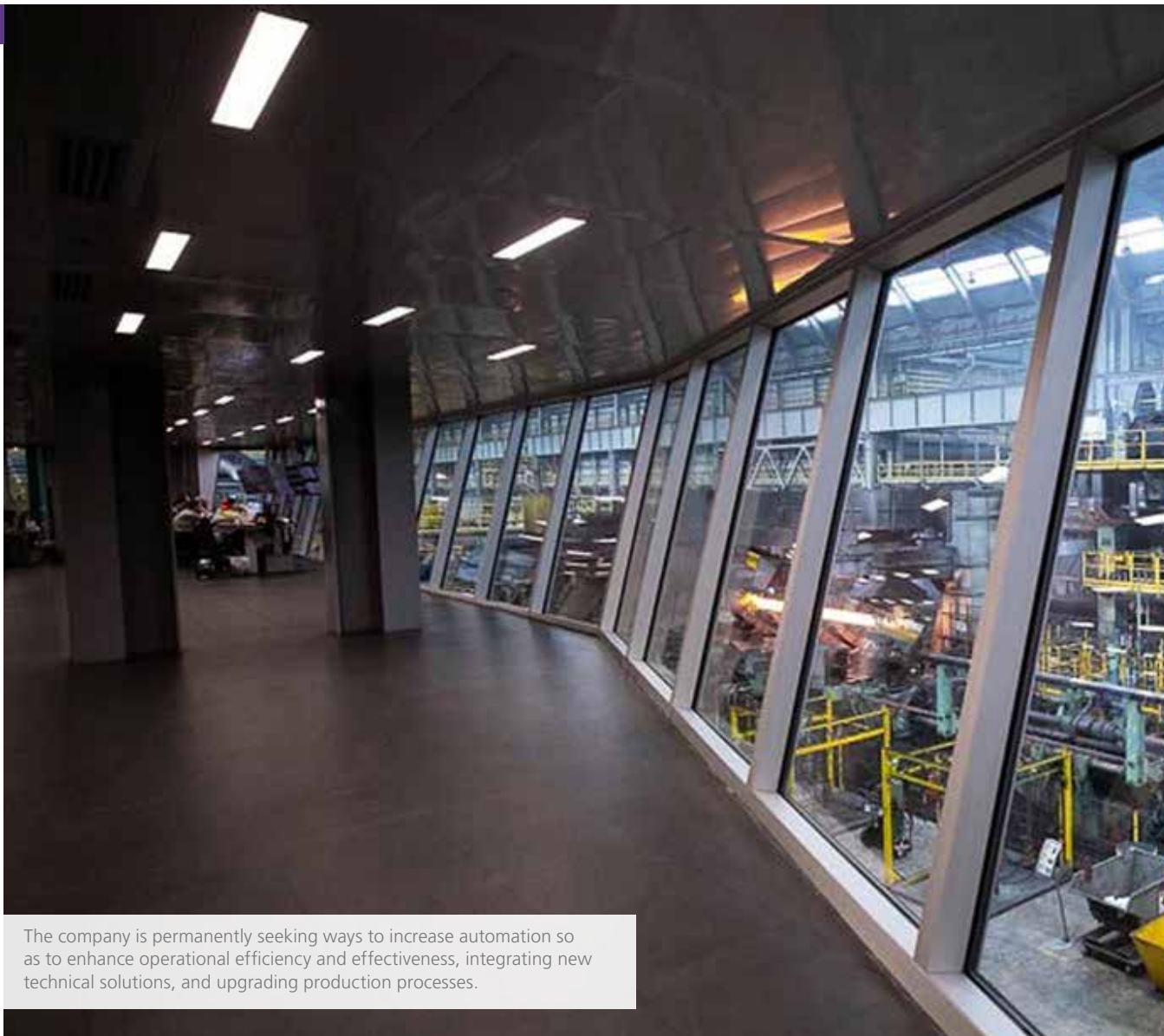
We have been investing in other digital technologies to make customer integration processes more efficient, lowering operational and supply chain costs and creating new opportunities for collaboration.

Our recently launched Digital Box also includes PipeTracer®, digital datasheets for OCTG products, and sets of application programming interfaces (APIs) designed to integrate our digital platform with our customers' ERP systems for seamless interaction and information exchange.

PipeTracer® is a traceability application allowing operators to identify Tenaris products onsite through mobile devices. This app makes technical specifications and running guidelines easily accessible and stores each pipe's unique manufacturing history, improving product reliability. This online tool also generates digital tallies, doing away with the need for manual pipe measurement tasks and reducing handling, errors and workload, making operations safer and more efficient.

In addition, Tenaris has developed an online marketplace for smaller customers, including construction companies and distributors needing to place occasional orders. This spot-buy marketplace, currently available in Argentina and Mexico, is another example of how Tenaris is applying e-commerce technology to deepen its knowledge of customer needs.

Turning to field service, at the start of the pandemic Tenaris implemented an emergency remote assistance program. Following the project's success with customers around the world, the online field service solution is on track to becoming a potential solution in an increasingly digital world.



The company is permanently seeking ways to increase automation so as to enhance operational efficiency and effectiveness, integrating new technical solutions, and upgrading production processes.

### Industry 4.0

At Tenaris, the digital transformation process continually offers new optimization opportunities for the business as a whole, and our industrial system is no exception.

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We are pooling data and using predictive analytics, autonomous robotics, the Internet of Things, Cloud technology and Artificial Intelligence, transforming our manufacturing system into a Connected Factory able to continuously adjust and self-optimize.

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In terms of human-machine collaboration, robotic process automation, digital assistants and wearable technology have contributed to enhancing the workplace experience for our employees by eliminating repetitive tasks and making key data easily accessible in real time. With video analytics, automated risk detection systems and telemetry, we continue improving operational safety.

These interlinked pools of data with standardized and detailed views of key metrics across all our plants, are transforming our industrial management, providing an in-depth view and understanding of the performance of our plants in real time so we can focus on opportunities for improvement in quality, productivity and costs.





We've been applying data science to industrial processes in order to improve safety, increase yield, and reduce raw materials and consumables, as well as developing the Unified Dimensional Analysis Suite to reduce the cost indicator real nominal index.”



**Vincenzo Manzoni**  
Data Science Director

## 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 2020, supplied mainly by Vale International S.A. in Brazil, was approximately 115,000 tons, a low level compared to previous years as we reduced capacity utilization and stocks in response to the COVID-19 crisis.

The availability and prices of iron ore or other raw materials may be negatively affected by several events such as interruptions in production, accidents or natural disasters, among others. In order to mitigate this risk, we have been working on the development of alternative suppliers to reduce dependency on just one supplier. 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 our sister company, Ternium, we carry out a rigorous selection process to ensure that all our suppliers meet the standards enshrined in our QHSE policy and Code of Conduct, and comply with local laws and regulations in force. 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 allow us to certify that our service suppliers performing high HSE-risk activities have the necessary capabilities. As of December 2020, we have audited and certified around 75% of our active service suppliers classified as high HSE risk suppliers, which is a prior requisite for the award of a service contract.

The audit is based on a standard self-assessment process designed by Tenaris specifically for suppliers wishing to provide services to Tenaris. During 2020, 295 new audits were performed, and improvement plans conducted when gaps were detected.

Tenaris purchases most of its supplies through Exiros. In December 2020, Exiros had a total of 40,594 registered suppliers, of which 13,825 were active during the year, with 8,638 supplying Tenaris. Exiros has a quality system certified under ISO-9001 standards.

### **ProPymes: bolstering suppliers from our local community**

Our ProPymes Program was developed with our sister companies Ternium, Tecpetrol and Techint Engineering & Construction to support Small and Medium-sized Enterprises (SMEs) working in our value chain in Argentina and other countries, helping them to build sustainable and globally competitive operations.

From its origins, ProPymes sought to institutionalize assistance for SME customers and suppliers, by implementing a comprehensive corporate program to bolster its value chain. Today, it supports over 900 SMEs in Argentina, sharing know-how and best practices to help managers and employees alike.

The companies taking part in the program have a vocation for industrial growth and are selected on the basis of their export potential, the quality of their production, and the vision of their leaders.

The ProPymes Institutional Assistance program offers world-class strategic advice to owners and managers,

aimed at ensuring a level playing field in their local markets. We use our network to help them reach out to potential customers worldwide, fostering investments in productivity to increase capacity by using low-cost financing programs. We support product development through access to Research Centers, and work with them to improve QHSE systems.

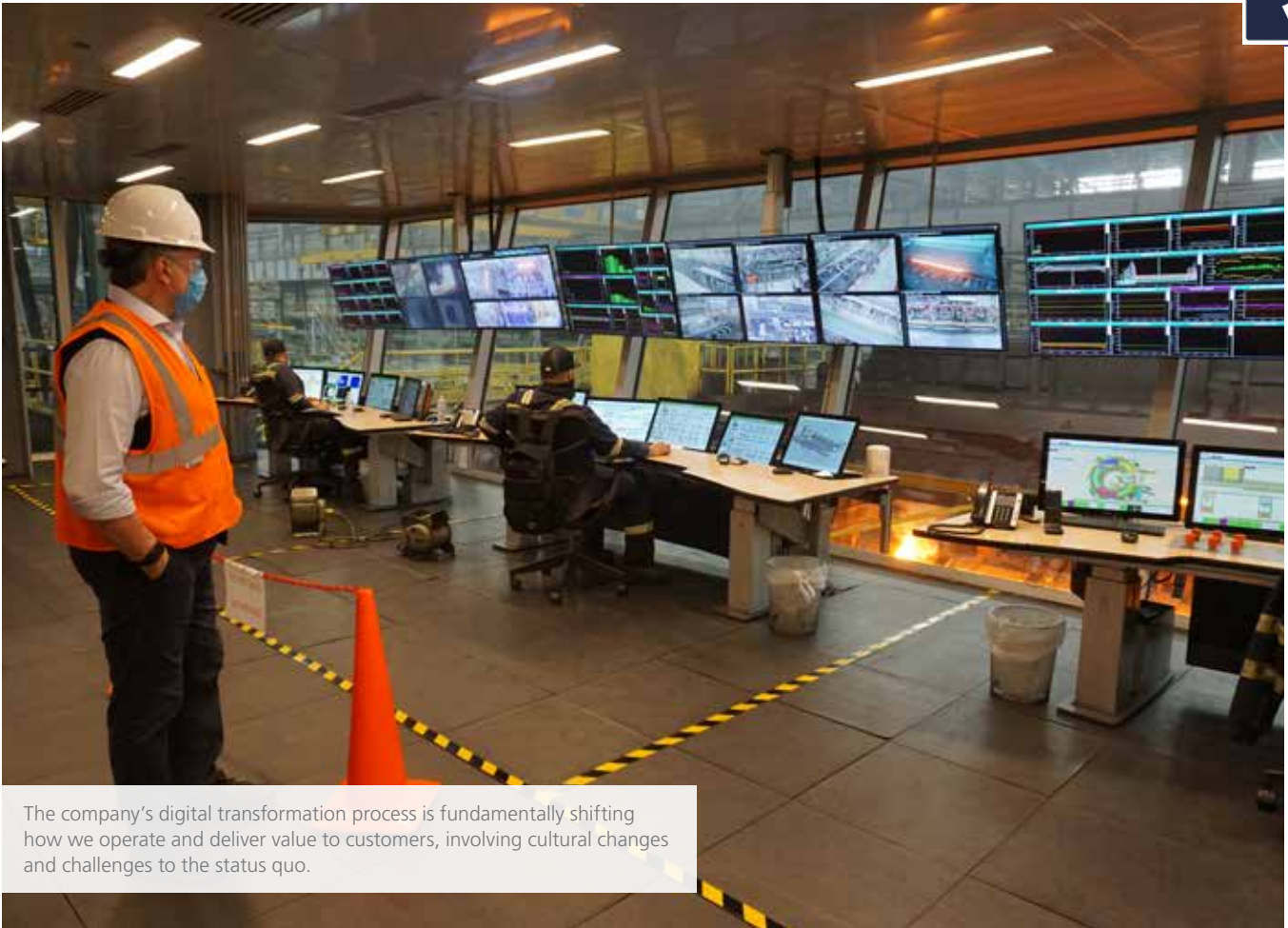
The program has joined forces with one of our community education programs: Technical Gene, supporting technical secondary education to respond to the needs of the industrial labor market. In practice, this means encouraging ProPymes SMEs to dovetail with the program and help develop future generations of engineers and technicians to work in industry by providing on-the-job training.

In 2020, the Propymes Technical Gene Program offered students from technical schools in 43 cities the opportunity to put their skills into practice this way.

As the measures to curb the spread of the COVID-19 virus drove communications and training online, we transformed our programs to transmit knowledge about automation technologies, HSE protocols and HR management strategies in a virtual arena. As well as helping our value chain to protect its people against COVID-19, we delivered 3,000 face shields to 52 SMEs throughout Argentina.

In 2020, the ProPymes Program broke its yearly record, benefiting 4,824 people. The idea was to provide SMEs with tools to help them weather the pandemic-related crisis while preserving their long-term vision, encouraging them to take a strategic look at the way they manage their teams in order to improve management and increase productivity.

We believe that ProPymes must act as a platform for teamwork, helping the value chain in its quest for answers to the new issues emerging, and helping us to anticipate future changes.



The company's digital transformation process is fundamentally shifting how we operate and deliver value to customers, involving cultural changes and challenges to the status quo.

## Key indicators

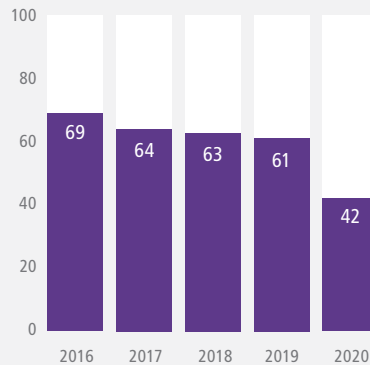
### Tenaris suppliers by country (\*)

Country	Local suppliers	Suppliers from abroad	Total suppliers
Argentina	1,473	246	1,719
Mexico	1,059	264	1,323
Italy	900	165	1,065
Rumania	699	246	945
Brazil	871	56	927
USA	805	119	924
Colombia	360	86	446
Canada	301	113	414
Saudi Arabia	246	88	334
Indonesia	183	48	231
China	149	12	161
Nigeria	101	36	137
Uruguay	5	2	7
Kazakhstan	-	4	4
Chile	1	-	1
<b>Total</b>	<b>7,153</b>	<b>1,485</b>	<b>8,638</b>

(\*) 83% of our suppliers are local.

### Investment in R&D

In USD million



12 NOCAZIONI TENARIGALLIENE | CORONAIBUS | TENARIGALLIENE LIBRE NOC-KOONG | NOC-KOONG TENARIGALLIENE



**ATTENZIONE**

Questa cabina  
non è a libero accesso  
per ditte terze

INDOSSANDO  
MASCARINA,  
OCCHIALI  
E GUANTI  
DI LATTICE



**CAUTION**

Access to third party  
personnel  
in this cabin is allowed

ONLY  
WEARING MASK,  
GLASSES  
AND LATEX  
GLOVES



**ATENȚIE**

În această cabină accesul  
personalului companiilor  
externe este permis

NUMAI CU MASCA,  
OCHELARI  
ȘI MĂNUȘI  
DIN LATEX

**REGOLAMENTO PER  
ACCESSO ALLE CABINE**



AL FINE DI MANTENERE  
LA DISTANZA DI SICUREZZA

**È VIETATO ACCEDERE  
IN PIÙ DI 5 PERSONE  
CONTEMPORANEAMENTE**

GRAZIE

Tenar



# Human Resources

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## → Our commitment

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

## → 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

## → 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.

1.2

MILLION HOURS  
HOURS OF TRAINING  
DELIVERED IN 2020

88

NATIONALITIES  
REPRESENTED ON  
OUR TEAM

97%

SUPERVISORS  
RECEIVED UPWARD  
FEEDBACK

91%

PARTICIPATION  
IN LAST ENGAGEMENT  
PULSE SURVEY  
(NOVEMBER 2020)



The company's three 2020 Pulse Surveys sought input from employees about the impact of the pandemic on their health and wellbeing, encouraging them to contribute suggestions to improve the organization's response.



Something we've learned to look for in our leaders is their ability to lead with care, especially in challenging times when difficult decisions are needed.”



**Paola Mazzoleni**  
Chief Human Resources  
Officer

## Responding to COVID-19

COVID-19 and the measures taken by governments to contain the spread of the virus, including restrictions of business and social activity have shone a spotlight on the inter-dependence between human health and organizational success. The crisis has renewed focus on employees and their wellbeing, and the actions that companies are taking to protect them.

Tenaris reacted swiftly to the situation, putting in place comprehensive measures to protect the health and safety of employees, customers and suppliers, and adapting digital systems to make it possible for employees to work from home where possible.

Clear communication routines were established between teams and management while the company's senior executives embarked upon a series of virtual Live Talks at global and regional level. These events were vital to providing an online audience from around the world with the necessary reassurance and guidance as the latest developments and corporate decisions were discussed.

### Health and safety protocols at plants and offices

With several national governments ordering country-wide restrictions on all non-essential tasks, work at many of Tenaris's mills was suspended. Health and safety protocols were introduced for all personnel throughout our facilities, including temperature checks at entry and exit points, frequent and regular disinfection and cleaning routines, the use of facemasks, transport protocols and social distancing rules, as well as the redesign of common areas.

The company provided medical support for suspected cases of infection, devised schemes for teams to work in individual cells at the mills to limit the potential for contagion, and encouraged people to work from home.

### Restructuring for a more competitive future

The sharp fall in demand for our products and services following the onset of the pandemic and the collapse in oil prices accelerated a restructuring process that was already on the agenda to respond to a more complex competitive environment and increased market uncertainty around the forthcoming energy transition. A second cyclical downturn within five years, overcapacity in our industry and the imperative to ensure the company's financial stability during the pandemic, made it clear that we would have to make a 25% reduction in our fixed cost structure.

The decisions taken were necessary to ensure the company's sustainability in the new scenario, and responded to the local realities in each of our markets. There were salary and personnel adjustments at all levels, starting with top management, and we spent a total of USD 142 million in severance packages during the year. Facilities were closed in some countries, while in others, the company applied suspension programs, working with unions and government to shield employees as much as possible.

A support structure was set up to help former employees adjust, covering their health insurance needs and providing career and professional advice in addition to balanced severance pay.

“ Digital learning is an opportunity that we can all take advantage of in this new context, and a way of boosting skills for new managers to support them as they face the challenges and rewards of managing people.”



**Horacio Galli**  
Senior Director,  
TenarisUniversity

## Training people to adapt to change

From the beginning of the lockdown measures in March, TenarisUniversity took on a role as a vital channel delivering practical resources to help employees work from home and support their wellbeing. The company quickly transformed its training program to a digital format by promoting online learning forums.

As in-person training hours were cut and global leadership programs such as the Advanced Management Program (AMP) were canceled, the company compensated by creating virtual training programs, many of which were hosted on the Degreed Platform.

A broad-based offer was speedily rolled out, beginning with the practical Pathway series to support employees in their efforts to adjust to the new situation: the launch of Coronavirus – Facts, Prevention and Care in March was rapidly followed by Best Practices for Working Remotely, including recommendations for working from home, looking after mental health, keeping the work-life balance, ergonomics, how to set up a home office, and best practices for supervisors.

Other courses followed suit, such as Leading with Care and Managing People during the Coronavirus Pandemic for supervisors, as well as Preparing Employees for Workplaces for COVID-19, containing control measures and health protocols as part of the return to the workplace.

In a similar vein, a Digital Mindset program, fully available on Degreed since March, was specifically designed to foster a greater understanding of the

digital disruptors transforming our industry, aimed at preparing people to take a positive approach to innovation and embrace change.

## Forging essential leadership skills

TenarisUniversity also transformed its leadership development courses, given the need to help new managers build teams in a virtual format. Launched in September 2020, the international program Management Essentials: The Journey to Great Leadership was developed to help new managers acquire the awareness and confidence needed to succeed in their role as supervisors and enhance their own engagement as well as that of their teams. Over the course of ten months, junior managers learn how to manage motivation and delegation and build their own networks through Peer Learning Teams, a new exchange methodology encouraging practice sessions between participants.

The company’s Global Trainee Program, which has so far trained over 2,700 young professionals, also shifted the content of its program online, and saw 75 Global Trainees from all around the world joining in a unique online graduation ceremony, celebrating the culmination of their two-year journey on the program, and a new beginning for their professional careers at Tenaris.

Another online success has been Business Acumen, a leadership skills development course produced in partnership with Wharton Business School (University of Pennsylvania), delivered digitally and complemented with a series of masterclasses given by company experts on Marketing, Finance, Accounting and Human Resources.





The company developed action plans to follow up with employees, involving them in processes to suggest new ideas about how to operate and behave.

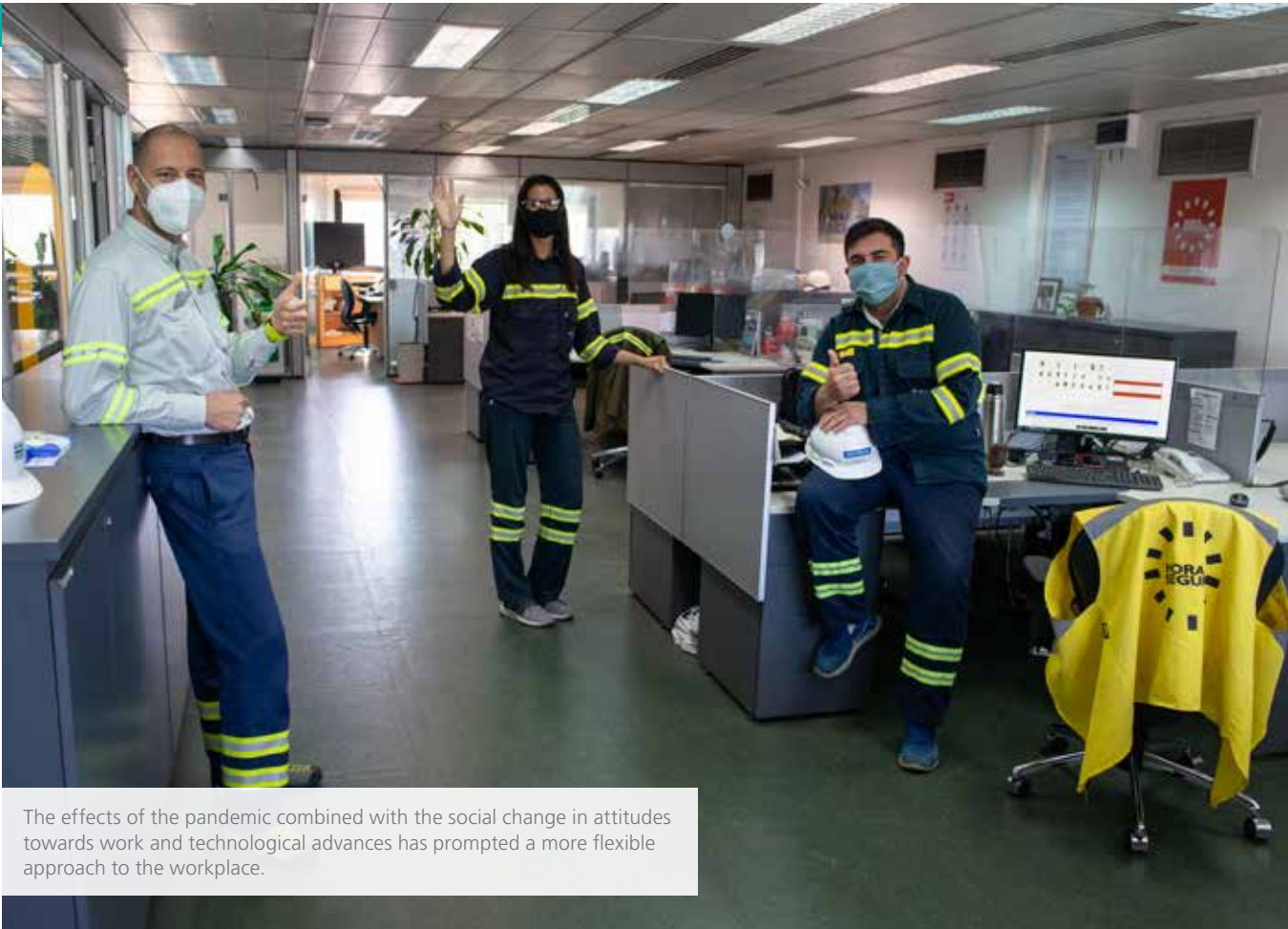
Ensuring that top management is fully involved with the sweeping changes taking place, the company held two Engagement Leaders webinars for senior executives, given by IMD professors to address the role played by corporate leaders in shaping how the company moves towards its new objectives.

The success of our online educational programs, the fact that these can be delivered at a lower cost to a far greater universe of participants without undermining the quality of their content, points to an extraordinary opportunity to expand learning throughout the company.

## Monitoring employee engagement

One of the most pressing challenges for the company during the pandemic has been how to engage employees in an authentic and effective way to ensure they can continue to give of their best as part of an all-around commitment towards the organization's goals and values. Clear and frequent communications, using all the online means available, from the company intranet to social media and webinars, has been the cornerstone of the strategy to keep in close touch with employees at all organizational levels.

Periodic Town Hall Meetings were held online with the members of the Tenaris Executive Committee in order to build a common understanding of the situation and to ensure that management's wellbeing initiatives sufficiently addressed employee concerns.



The effects of the pandemic combined with the social change in attitudes towards work and technological advances has prompted a more flexible approach to the workplace.

The main issue throughout was to ensure that people's needs were being met as they worked from home, reaching out to pre-empt any negative reactions and fears resulting from aspects of the enforced confinement. In addition, considerable effort has gone into refining messages underscoring a common purpose and a positive future scenario, beyond the difficulties of the present, to motivate and inspire people.

### Pulse Surveys

An essential part of the communications strategy was built around the employee surveys, held in April, August and November, designed to monitor working conditions, check on employees' wellbeing, and identify challenges in order to deploy targeted initiatives to support the new hybrid working scenario.

As well as questions aimed at eliciting feedback on satisfaction with the company as a place to work, the last survey sounded out people's views on initiatives and behaviors that contribute to creating an environment with greater flexibility, accountability and inclusion.

Employee participation in all three surveys was extremely high, reaching 91% for the November 2020 poll, which confirmed people's interest in making their voices heard as well as their trust in the process as an effective tool to drive change. Another positive result, particularly given the challenging situation, was the overall high level of satisfaction with the company as a place to work, achieving a score of 81% in November, very much in line with previous surveys.

As a result of answers to specific questions included in the April and August polls, the company introduced a new global flexible working program, implemented a range of innovative IT tools and offered a one-off Office Equipment Allowance, all of which were extremely well received according to the responses given in the November survey.

## Towards a New Way Of Working



Enhance priority and agenda management.



Foster the adoption of new technologies.



Promote a more collaborative working environment.



Endorse an innovative and entrepreneurial mindset.



Strengthen employee accountability in new working scenarios.



Facilitate and foster the adoption of agile decision making skills.



Reinforce a culture that supports constant and frequent feedback.



Stimulate leadership skills based on active listening and empathy.



Encourage healthy behaviors aimed at the wellbeing of all team members.

## Transitioning to the future

Tenaris's identity depends on the resilience and ingenuity of its people, enabling the company to act swiftly and resolutely to tackle challenges. The pandemic is changing working paradigms, and in keeping with the priorities that have arisen, Tenaris has designed a new working program. Envisaging profound changes in the way employees carry out their tasks in industrial and office settings, the approach is rooted in a different concept of relationships as the foundation for a holistic working culture.

Towards a New Way Of Working (NWOW) reflects a new vision of work in a post-COVID-19 context, incorporating flexible methodologies, aided by technology and innovation, with greater diversity and inclusiveness, as the notion of a physical workspace becomes more fluid.

The program targets nine behaviors to support the transition, underpinned by a series of actions geared towards achieving a more integral approach to work, helping leaders, managers and employees to adapt to new realities.

The main message is about changing the paradigm governing employee-manager relationships to center it on trust and care, so that over time, people become more accountable and take broader responsibility for achieving their objectives, regardless of where and how they work.

## Inclusion in a virtual context

The Work From Home scenario has undoubtedly ushered in new opportunities for employees to balance their work-life schedules, leveraging the flexibility offered by no longer having to commute, and thus being more able to take part in family life, organizing schedules around other priorities as they arise.

This is particularly the case for parents with young children, or people who live at a considerable distance from the office, as well as for workers with disabilities, where self-care becomes that much easier.

Flexible working schedules have been a definite plus for the women in the company caring for babies after their maternity leave, allowing them to balance being part of their children's lives with being present at work to meet specific demands and more effectively pursue their career.

Furthermore, to ensure that opportunities for inclusion are not lost as remote work takes the place of chance or casual conversations, the Human Resources department has implemented check-in chats between managers and employees to ensure they stay in touch. These have been bolstered by the continuous pieces produced by the Communications department for publication in the company's digital newsletter TenarisToday, and its mill periodicals.

The social media communications strategy put into practice by the company has focused on providing training for middle and senior management to manage their social media accounts, from Facebook and Twitter to Instagram and LinkedIn, and post information to support corporate messaging.

## Rules for organizational health

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.

Tenaris is subject to the UK Modern Slavery Act 2015. In February 2020, the Board of Directors approved the company's annual Modern Slavery Statement (see [www.tenaris.com/en/sustainability/governance-and-ethics/](http://www.tenaris.com/en/sustainability/governance-and-ethics/)).

## DIVERSITY

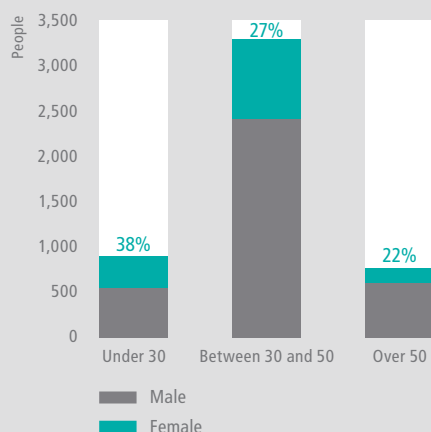
The company has a rich diversity of nationalities throughout its management, and has been making efforts to increase its gender diversity.

We closely monitor not only the access of women to leadership positions but also the percentage of women joining the company overall, an active approach which

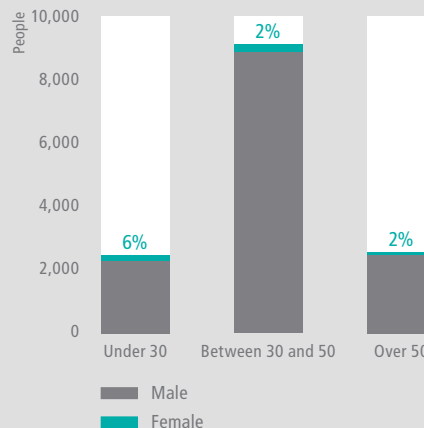
aims to move beyond a set of goals and implement specific policies to address the gender gap.

Several initiatives, such as talent review, mentoring programs, and opportunity committees, are working to eliminate biases in the selection process and accompany, guide and develop female talent.

**Percentage of women  
Professional employees by age**



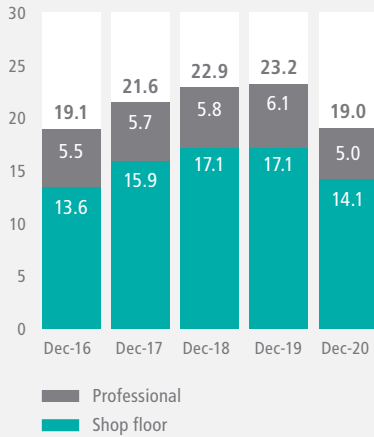
**Percentage of women  
Shop floor employees by age**



# Key indicators

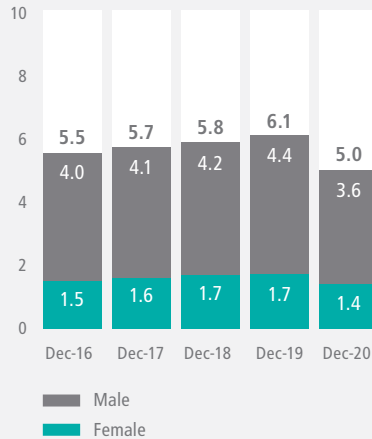
## Shop floor and professional employees

In thousands of people



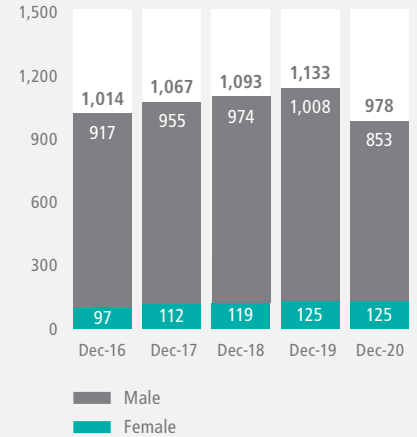
## Professional employees by gender

In thousands of people



## Senior managers by gender

Numbers of persons



## Employee participation in TUIC, MDP, AMP and LP courses

Participants per course

Year	TUIC	MDP	AMP	LP
2016	145	123	-	42
2017	65	54	104	40
2018	133	113	48	38
2019	183	105	52	39
2020	-	49	-	-

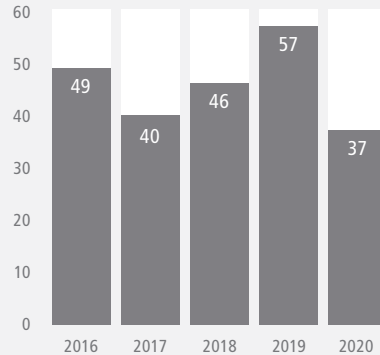
TUIC: TenarisUniversity Induction Camp

MDP: Management Development Program

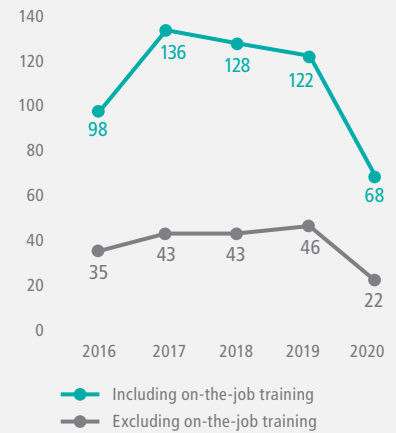
AMP: Advanced Management Program

LP: Leadership Program

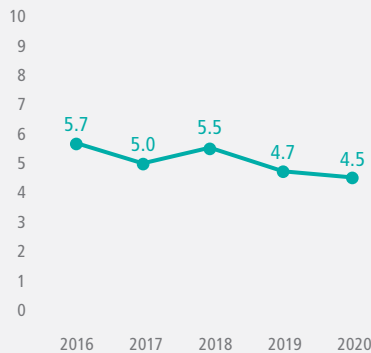
## Total training hours per professional employee



## Total training hours per shop floor employee



## Professional employees resignation rate

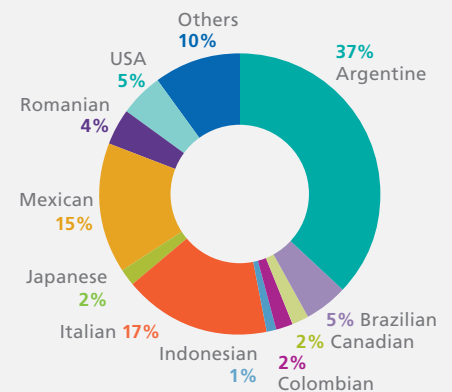


Percentage of professional employees resigning from the company in previous 12-month period.

## Employees by nationality

Mexican	4,680
Argentine	4,507
Italian	2,026
Romanian	1,562
Brazilian	1,362
USA	1,188
Colombian	750
Indonesian	519
Canadian	510
Japanese	399
Others	1,525

## Senior managers by nationality





# Community Relations

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## → 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.

## → 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
- Foster integration through voluntary work

## → 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.

USD

12.7

MILLION  
COMMUNITY  
INVESTMENT  
IN 2020

USD

5.1

MILLION  
INVESTMENT  
IN EDUCATION  
IN 2020

12,475

BENEFICIARIES  
OF OUR EDUCATION  
PROGRAMS

20

HEALTH INSTITUTIONS  
SUPPORTED



We acted quickly to support our communities' response to the crisis providing infrastructure, medical equipment and know-how, and ensuring that the pupils in our educational programs were able to continue with their studies.”



**Erika Bienek**  
Community Relations  
Director, Techint Group

## In response to COVID-19

In response to the impact of the pandemic and the measures taken to curb its spread throughout all sectors of society, Tenaris acted decisively and swiftly at the start of the outbreak, deploying the first-hand experience of Humanitas, our affiliated company which runs a medical university and hospital network in Italy. We also took into account the indications received in the early days from our operations in China and in Bergamo, Italy, allowing us to support a series of far-sighted measures designed to shield the company and its neighboring communities.

In March, the company established a fund of USD 6.2 million, complemented by a contribution from the controlling shareholders, to bolster the healthcare infrastructure in 17 communities in Argentina, Brazil, China, Colombia, Italy, Mexico, Romania, Saudi Arabia, Uruguay, the U.S. and Canada.

In collaboration with Exiros, our global purchasing company, we deployed our global purchasing capabilities to provide equipment to 20 hospitals in our communities, including 87 ventilators, 2,694 hospital biosafety items and 461,884 personal protection elements for health personnel.

We worked with our Engineering area and modified production lines to manufacture more than 80,000 faceshields, which were subsequently distributed in the communities in Argentina. We built and partially funded the COVID-19 Community Hospital for the Austral Hospital in Argentina, and upgraded infrastructure at several community hospitals near our sites in Argentina, Italy and Mexico.

In Argentina, we converted the company hotel in Campana into a temporary field hospital for local healthcare institutions deriving patients suffering from COVID-19.

In coordination with Humanitas, we held two virtual meetings where Humanitas doctors shared their experience and know-how with over 200 doctors from our communities in Argentina, Brazil, Mexico, Colombia, Uruguay and Ecuador. We also set up a publicly accessible online campus to host the extensive corpus of Humanitas material on treating and handling COVID-19 at <https://www.aprenderdecoronavirus.com/>.

## 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. In 2020, USD 5.1 million of our Community Relations budget was invested in education, a reduction compared with preceding years due to the impact of the pandemic and the additional supplementary funding provided by our controlling shareholders.

### Developing high standards of technical education

At the heart of our education drive lie the 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 second class of graduates from the Roberto Rocca Technical School in Campana, Argentina, finished their industrial internships virtually.

The ETRR program was launched to educate high school students from our communities using innovative teaching methods and technologies for classrooms and laboratories. Students receive different scholarships depending on their needs.

The first School, inaugurated in 2013 in the city of Campana, Argentina, has a capacity of 420 students, while our sister company Ternium opened a second technical school in 2016, with a capacity of 384 students in the town of Pesquería, Nuevo León, Mexico.

During the pandemic, we launched a remote teaching system to ensure the continuity of education, and preserve the quality of students' learning experiences. Thanks to coordinated efforts made by management and teaching staff, we were able to provide accompaniment and educational, technological and

nutritional support to students throughout. Despite the pandemic, during 2020, the ETRR students continued with their studies and completed their industrial internships online.

As the pedagogic approach focuses on creativity and self-expression as an integral part of all-around student development, in 2020 we transformed the "Technical Gene Pitch" public speaking workshop into an online course. This was a new opportunity for students to hone their soft skills and create high-impact presentations, culminating in a live event held on the school's Social Media channels, where students shared their experiences of virtual industrial internships. Another successful online event was the student-organized series of TED Clubs, designed to help them improve their communication abilities and encouraging them to innovate and follow through on original ideas.

We continued reinforcing 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 2020, we trained 33 teachers to use this methodology, while 172 projects were developed and 137 exhibited by our students on the ETRR's Social Media accounts.

We believe that gifted teachers who are truly committed to both students and the community are a springboard for academic excellence. During 2020, we continued to improve our teacher performance evaluation system, including student surveys, in-field classroom observation and school committee evaluation. The ability to assess and guide improvement is central to our teacher development plan rewarding performance, attendance, technology use, and training. During 2020, 87 teachers were evaluated and trained as part of their continuous development.

Our 2020 Satisfaction Survey held among students, parents, teachers and staff achieved an average result of 4.4 on a 0-5 scale, with 5 the highest score. Despite the pandemic, satisfaction ratings increased by 14% versus 2018.

### **Strengthening technical education community-wide**

The Technical Gene program provides schools with infrastructure and equipment, as well as teacher training, school management, and on-the-job training internships for high-school students, leveraging the teaching and learning practices and concepts developed in 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.

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**Launched in 2006, Technical Gene is currently carried out in 11 communities in 8 countries. In 2020, 1,233 students and teachers participated in the initiative, most of which was imparted online.**

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In Zalau, Romania, we inaugurated an electrical measurement laboratory at the Octavian Goga Technological Secondary School, while in Batam, Indonesia, we supported the reconstruction of the automotive engineering workshop at the Al-Jabar vocational school in Cilegon.

In Argentina, we offer online physics and maths courses using different computer tools to train 16 teachers from Campana and Zarate. We continued with the maths project at 5 technical high schools to enhance skills among 37 teachers. At Pindamonhangaba, Brazil, we held an online Robotics Maker training course for 49 students where they learned robotics programming to build a robot with the kits supplied. In Veracruz, Mexico, we held a Technical Gene for Women course to encourage more women to choose technical studies. In Italy, our robotics training course moved online.

### **Starting at a young age**

The AfterSchool Program (ASP) is based on non-formal education for children between 6 and 12 from communities with considerable school dropout rates. The ASP offers extra hours of STEM (Science, Technology, Engineering and Maths) education four days a week to encourage primary school children to commit to learning and further their personal development in the longer term.



In Zalau, Romania, Tenaris volunteers refurbished the pneumatics and hydraulics laboratory at Mihai Viteazu Technological High School.

Launched in 2009, the program is currently implemented in seven communities. In 2020, we took the ASP online and 1,473 boys and girls took part in virtual classes, where the STEM proposal was adapted to each community.

In Cartagena, Colombia, we delivered 310 cell phones to students, helping to keep 93% of them active as part of the program throughout the year. In Pindamonhangaba, Brazil, we are sharing content through a platform whose content is open to the community and regularly shared on social networks.

In Zalau, Romania, we handed out home study kits, complemented by a presentation on COVID-19 given at one of the STEM workshops, while in Veracruz, Mexico, we strengthened the infrastructure of the two schools participating in the program.

Montevideo was the first community to return to face-to-face classes, serving as a guide for the adaptation of the program, and safety elements were delivered to students and their families.

### Encouraging educational excellence

Launched in 1976 in Argentina, the Roberto Rocca Scholarships program focuses on stimulating academic performance and commitment among high-school 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.

In 2020, we awarded 1,335 scholarships for high-performing secondary school pupils, 406 scholarships to undergraduate university students, and 9 to doctoral students studying outside their country of origin. A total of 1,750 scholarships were awarded in 2020.

Five graduates were selected from the ETRR Campana for university scholarships, while in Veracruz, we achieved a synergy between secondary and university scholarships by rewarding two university students who had previously received secondary scholarships from the program. In Pindamonhangaba, our close relationship with the Technical Gene initiative led to two former program participants receiving high school and university scholarships.

## Culture and tradition

### Opening horizons to remember 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 PROA Foundation in Argentina, whose invaluable expertise and experience guide the development and selection of quality content. In 2020, Tenaris invested USD 1.3 million in cultural activities in 7 countries.

Together with Fundación PROA, we organized two movie showings for the Drive-in Film Festival in Campana, attended by 2,728 spectators.

In 2020, seeking a way to maintain its relationships with the art-loving public, PROA presented the online “Artist Classes”, and hosted “Creating Worlds”, a collection of works by 50 female artists who have contributed to PROA exhibitions throughout its history.

In Italy, the Fondazione Dalmine, next to our mill in Bergamo, celebrated its 20<sup>th</sup> anniversary of activity disseminating Tenaris’s history and industrial culture. In addition to exhibitions and cultural activities, the foundation’s archive houses thousands of historical documents that narrate the history of the last century in the region. Together with the Techint Group Archive Center in Buenos Aires, the institution contributes to 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 2020, over 3,500 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 PROA Foundation. PROA, Tenaris and its sister companies in the Techint Group organized two virtual meetings hosted by well-known photographers on the history of photography, women in photography, and photography in Argentina for 1,543 participants.

Tenaris is the main sponsor of the contemporary art foundation 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. During 2020, GAMeC welcomed 64,541 visitors.

## Volunteering: making a difference

### Volunteers in action

We are committed to making a difference and strengthening a sense of pride in belonging to the communities where we operate. Tenaris employees and their families regularly volunteer to improve local school infrastructure, joining students, their relatives, schoolteachers and neighbors in communal efforts.

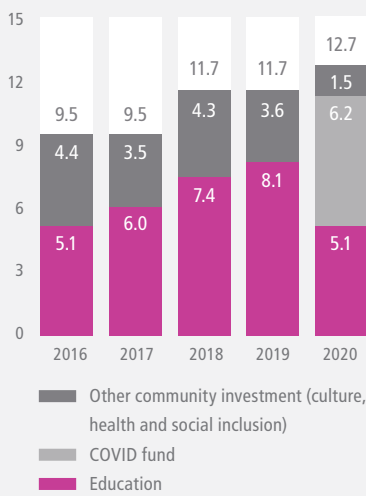
In 2020, although the pandemic severely restricted volunteering activities, 394 volunteers contributed 2,075 hours to 8 communities, respecting all the requisite health and safety protocols.

In Veracruz, before the pandemic and the ensuing restrictions were introduced, 147 volunteers revamped the facilities at the 2Z Industrial Technical High School. In Houston, 28 volunteers collaborated with the Houston Food Bank to package non-perishable food items for community kitchens, while in Zalau, 19 volunteers refurbished the pneumatics and hydraulics laboratory at the Mihai Viteazu Technological High School.

# Key indicators

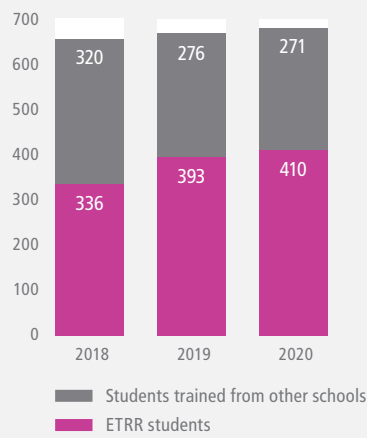
## Investment in the community

In USD million



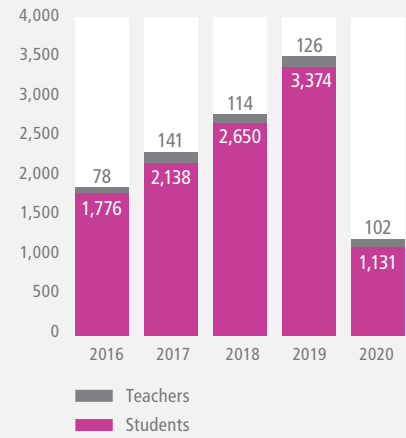
## Roberto Rocca Technical School

Students involved



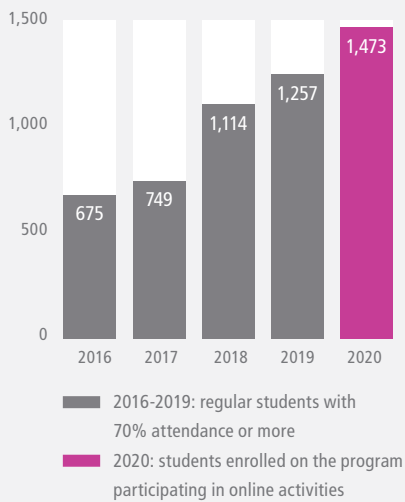
## Technical Gene

Students and teachers involved



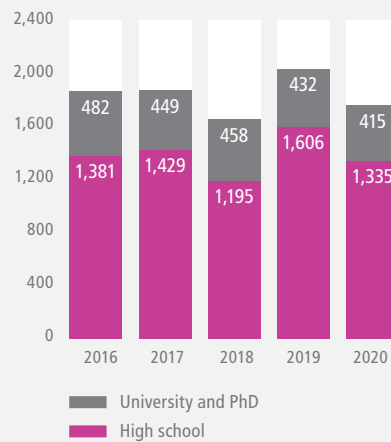
## AfterSchool program

Students involved



## Roberto Rocca Scholarships program

Students involved





# Governance, Risk and Compliance

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## → Our commitment

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

## → Our 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.

## Corporate governance

Tenaris is a Company established in 2001 in Luxembourg to consolidate the Techint Group's pipe and tubes business. In addition to controlling 60.45% of the shares in Tenaris, the Techint Group 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 and steel and mining; and Humanitas, a research hospital network in Italy.

The Company's shares trade on the Italian Stock Exchange and the Mexican Stock Exchange, and in addition, the Company's ADSs 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.

Currently, the Company's board of directors is composed of twelve directors, of which six qualify as independent directors under applicable U.S. securities regulations, and the company's articles of association. Our Chairman and CEO is Paolo Rocca, the grandson of the founder of the Techint Group.

The board of directors meets as often as required by the interests of the Company and at least four times per year. In 2020, the Company's board of directors met thirteen times.

The Company's board of directors is responsible for the strategic definitions of the Company and has delegated to the CEO 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. At the heart of the strategic definitions of the Company, which are the responsibility of the board of directors, lies the Company's strategy in relation to climate change-related risks and opportunities. On a quarterly basis, as part of their oversight responsibility, the board of directors reviews the Company's performance related to health, safety and environment.

On February 24, 2021, the Company's board of directors nominated its vice-chairman, Germán Curá, to oversee the development and implementation of the Company's strategy for addressing climate change going forward and agreed to review progress on this subject on a quarterly basis.

The Company's board of directors has an audit committee currently consisting of four independent members, which qualify as such both for purposes of the applicable securities regulations and under the Company's articles of association. Their charter sets forth, among others, the audit committee's purpose and responsibilities, including oversight responsibilities related to the integrity of the Company's financial statements; the effectiveness of the Company's system of internal control, risk management and internal audit over financial reporting; and the independence and performance of the Company's external auditors. In addition, the audit committee is required by the Company's articles of association to review material transactions with its subsidiaries and related parties to determine whether their terms are consistent with market conditions or are otherwise fair to the Company and/or 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](http://ir.tenaris.com/financial-and-sustainability-reports/reports).

### Risk management

As part of our commitment to sound corporate governance, Tenaris has established a process of risk identification and management. At the helm of the process is our Critical Risk Committee (CRC), tasked with assisting the board of directors, the audit committee and the CEO with the oversight of the risk management framework and processes and monitoring, assessment and review of risks, the development of mitigating actions, and the monitoring of action plans.

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 focuses on risks considered critical to the Company's assets, operations or reputation. 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 accidents that could be caused by natural disasters, cybercrime and climate change.

Climate-related risks include: i) physical risks associated with extreme weather, flooding, etc., and ii) regulatory risks associated with the energy transition which could affect demand for our products. Please see the Risk factors section in our 2020 Annual Report for further detail on our climate change-related risks. Also see the chapter on Climate Change for a discussion of the Company's strategy regarding the risks and opportunities of climate change as well as the targets assumed by the board of directors for the reduction of CO<sub>2</sub> emissions.

While the board of directors is responsible for the oversight of climate-related risks and opportunities, we manage these in an integrated way involving different areas of the Company. Our Environmental and Industrial teams continuously analyze the environmental impact of our operations, and define and implement mitigation actions, including research and development into production processes, capital expenditures and operating practices. Additionally, our Planning and Commercial teams also review the potential impact of climate change on the business of our oil and gas customers and consequent demand for our products and services.

Regarding climate change, as well as minimizing our own emissions, we have drawn up actions to raise awareness and foster a broader industry response.



These include cooperating with local governments on rational policies to help achieve the UN Sustainable Development Goals, raising business awareness. We are proactive about efficient energy management and CO<sub>2</sub> mitigation, and continue to participate in global steel industry actions.

In 2020, the CRC focused its attention to the preventive measures and mitigating actions in response to the COVID-19 outbreak and global crisis. It also focused on preventive measures to protect the Company from potential cyberattacks.

### **Business Conduct: committed to Compliance**

Tenaris is committed to building a corporate culture of transparency and integrity based on ethical behavior and compliance with law. Our Code of Conduct is the cornerstone of this effort. Since it was first published in 2003, it has been reviewed periodically to bring it up to date with the latest trends, and new provisions have been introduced when necessary. In addition, a Policy on Business Conduct has been in force since 2012.

The current Code of Conduct, updated in 2018, includes explicit language on the protection of data privacy, the promotion of fair and transparent economic competition, and the strengthening of a respectful workplace environment, in particular, respect for human and labor rights: no form of abuse, coercion, discrimination or slave labor is tolerated in our activities.

In addition, we have adopted a code of ethics for senior financial officers that applies specifically to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, which is intended to supplement the Company's code of conduct.

Tenaris's 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, renews 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 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 third-party 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 2020, Tenaris updated ten compliance and ethics related internal norms, and trained 530 employees in person or virtually worldwide. Training nurtures Tenaris's compliance culture and raises awareness to help with taking reliable decisions and to prevent bribery, corruption issues or any other actions disregarding company controls. Tenaris also trained 473 third-party employees based in high-risk countries.

The company regulates and standardizes its processes to evaluate, select and hire representatives or associated persons, such as commercial intermediaries, customs agents, permitting assistants, advisors and/or law firms. Procedures include the regulation of due diligence processes, internal authorization controls and standard provisions to ensure third-party commitment to following Tenaris's anti-bribery and anticorruption policies.

Regarding the due diligence process, the BCCO office has begun implementing a digital platform that will systematize due diligence, background checks, onboarding and monitoring of high-risk third parties, including representatives, commercial agents, traders and distributors as commercial intermediaries. The digital platform is expected to go live during 2021.

Tenaris believes that the effective involvement and responsibility of each employee, every day, is critical to the pursuit of an 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, as well as management meetings and other educational materials aligned with industry best practices. In 2020, Compliance issued 59 communications with a global reach within the Company.

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

### Remuneration Policy and Report

Tenaris has a compensation policy in compliance with the Luxembourg Law of August 1, 2019, (amending the Luxembourg Law of May 24, 2011) ("the Shareholders' Rights Law").

The Compensation Policy, available on the Company's website, reflects Tenaris's values, considering the characteristics of the industry where it operates. The directors and chief executive officer play a key role defining the Company's corporate strategy, and are often faced with critical decisions affecting the Company's present and future.

Its Compensation Policy seeks to:

- attract, motivate and retain individuals of caliber and experience;
- encourage long-term decision making;
- align compensation with performance and shareholders' return;
- ensure maximum transparency.

In this way, Tenaris seeks to continue encouraging long-term shareholder engagement.

On March 29, 2021, the Company's board of directors approved the 2020 Compensation Report. The 2020 Compensation Report is available on the Company's website and will be submitted to the non-binding vote of the shareholders at the next general meeting of shareholders of the Company scheduled to be held on May 3, 2021.

### Compliance Line

Tenaris has a Compliance Line available 24/7 to allow 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 2020, complaints had a substantiation rate of 48% 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 79% of cases the complainants identified themselves.

The Tenaris Compliance Line is available in nine languages and reports may be submitted in person, online, by email or through our toll-free numbers accessible in 32 countries.

### Shareholder's Compliance Line

Shareholders, investors and other interested parties have an exclusive channel to communicate their concerns related to accounting or reporting matters and also issues affecting the internal control over financial reporting process. 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 introduced in 2009 and updated in 2018. The Policy states that Tenaris acts in compliance with the Universal Declaration of Human Rights, the principles articulated in the International Labor Organization's Declaration of Fundamental Principles and Rights at Work and the United Nations Global Compact, and 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.

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.

Ours is a long-term industrial project, where we are sure that the only way to succeed and prosper is to build long-lasting relations with all our stakeholders, including employees, investors, customers, contractors and suppliers, as well as the communities where we operate and the industry where we belong.

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 of Tenaris’s suppliers, and its acceptance (or where applicable, the acceptance of equivalent standards) is a condition for entering into any contractual agreement to provide goods or services with Tenaris.

In 2020, Tenaris launched an e-learning training program for procurement department personnel directly involved in reviewing and monitoring due diligence responses provided by suppliers and third parties.

Our Company values and respects the cultures and traditions of the communities where it operates, and actively works to take into account the health, safety, environment, human rights and economic wellbeing of those communities where it operates.

In February 2020, the board of directors approved the Company’s annual Modern Slavery Statement, available on [www.tenaris.com/en/sustainability/governance-and-ethics/](http://www.tenaris.com/en/sustainability/governance-and-ethics/).

# GRI Content Index



GRI Disclosures	Description	Reference
<b>100 series</b>	<b>GENERAL DISCLOSURE</b>	
<b>102</b>	<b>Organizational Profile</b>	
102-1	Name of the organization	Tenaris S.A.
102-2	Activities, brands, products and services	8
102-3	Location of the organization's headquarters	85
102-4	Countries where the organization operates	16,17
102-5	Nature of ownership and legal form	69, Public limited liability company
102-6	Markets served	8
102-7	Scale of the reporting operation	80-84, AR <sup>(1)</sup>
102-8	Employee structure	51-59, 80-84
102-9	Organization's supply chain	43-49
102-10	Significant changes regarding the organization's size, structure, ownership, or its supply chain	AR
102-11	Precautionary Principle or approach	70, 71
102-12	Externally developed charters, principles, or initiatives	8-11
102-13	Memberships in associations and advocacy organizations	8,9
102-14	Statement from senior decision-maker	3-5
102-16	Values, principles, standards and norms of behavior	8-17
102-18	Governance structure	69
102-40	List of stakeholder groups	12,13
102-41	Collective bargaining agreements	83
102-42	Identifying and selecting stakeholders	12,13
102-43	Approach to stakeholder engagement	12,13
102-44	Key topics and concerns raised	12,13
102-45	Entities included in the consolidated financial statements	CFS <sup>(2)</sup> Note 31
102-46	Defining report content and topic boundaries	8,9
102-47	List of material topics	12-15
102-48	Restatements of information	No
102-49	Changes in reporting	SASB & TCFD
102-50	Reporting period	Year 2020
102-51	Date of most recent report	April 29, 2020
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	irtenaris@tenaris.com
102-54	Claims of reporting in accordance with the GRI standards	9
102-55	GRI content index	75
102-56	External assurance	No
<b>103</b>	<b>Management Approach</b>	
103-1	Explanation of the material topic and its boundary	8, 9, 14, 15 <sup>(3)</sup>
103-2	The management approach and its components	8, 9, 14, 15 <sup>(3)</sup>
103-3	Evaluation of the management approach	8, 9, 14, 15 <sup>(3)</sup>

<sup>(1)</sup> AR: 2020 Tenaris Annual Report

<sup>(2)</sup> CFS: 2020 Tenaris Consolidated Financial Statements

<sup>(3)</sup> In the introduction to each of the chapters in the report

GRI Disclosures	Description	Reference
<b>200 series</b>	<b>ECONOMIC INDICATORS</b>	
<b>201</b>	<b>Economic Performance</b>	
201-1	Direct economic value generated and distributed	19
201-2	Financial implications and other risks and opportunities due to climate change	10
<b>203</b>	<b>Indirect Economic Impacts</b>	
203-1	Infrastructure investments and services supported	18
203-2	Significant indirect economic impacts	18
<b>204</b>	<b>Procurement Practices</b>	
204-1	Proportion of spending on local suppliers	47-49
<b>205</b>	<b>Anti-corruption</b>	
205-1	Operations assessed for risks related to corruption	69-74
205-2	Communication and training about anti-corruption policies and procedures	69-74
<b>300 series</b>	<b>ENVIRONMENTAL INDICATORS</b>	
<b>301</b>	<b>Materials</b>	
301-2	Recycled input materials used	36, 37, 41, 81
301-3	Reclaimed products and their packaging materials	36, 44, 45
<b>302</b>	<b>Energy</b>	
302-1	Energy consumption within the organization	81
302-3	Energy intensity	41, 81
302-4	Reduction of energy consumption	41, 81
302-5	Reduction in energy requirements of products and services	41, 81
<b>303</b>	<b>Water</b>	
303-1	Interactions with water as a shared resource	39, 41, 81
303-2	Management of water discharge-related impacts	39, 41, 81
303-3	Water withdrawal	39, 40, 41, 81
303-4	Water discharge	39, 41, 81
303-5	Water consumption	39, 41, 81
<b>305</b>	<b>Emissions</b>	
305-1	Direct GHE - Scope 1	41, 80, 81
305-2	Energy indirect GHE - Scope 2	41, 80, 81
305-3	Other indirect GHE - Scope 3	41, 80, 81
305-4	GHG emissions intensity	41, 80, 81
305-5	Reduction of GHG emissions	41, 80, 81
305-7	NOx, SOx and others	35, 81

GRI Disclosures	Description	Reference
<b>306</b>	<b>Waste</b>	
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306-2	Waste by type and disposal method	36, 81
<b>308</b>	<b>Supplier Environmental Assessment</b>	
308-1	New suppliers that were screened using environmental criteria	47, 48
<b>400 series</b>	<b>SOCIAL INDICATORS</b>	
<b>401</b>	<b>Employment</b>	
401-1	New employee hires and employee turnover	59, 82
<b>403</b>	<b>Occupational Health &amp; Safety</b>	
403-1	Occupational health and safety management system	21-27
403-2	Hazard identification, risk assessment, and incident investigation	21-27
403-3	Occupational health services	21-27
403-4	Worker participation, consultation, and communication on occupational health and safety	21-27
403-5	Worker training on occupational health and safety	21-27
403-6	Promotion of worker health	21-27
403-7	Prevention and mitigation of occupational health and safety impacts	21-27
403-8	Workers covered by an occupational health and safety management system	21-27
403-9	Work-related injuries	21-27, 80
403-10	Work-related ill health	21-27, 80
<b>404</b>	<b>Training and Education</b>	
404-1	Average hours of training per year per employee	59, 82
404-2	Programs for upgrading employee skills and transition assistance programs	54
404-3	Percentage of employees receiving regular performance and career development reviews	59, 82
<b>405</b>	<b>Diversity and Equal Opportunities</b>	
405-1	Diversity of governance bodies and employees	59, 82
<b>412</b>	<b>Human Rights Assessment</b>	
412-2	Employee training on human rights policies or procedures	73
<b>413</b>	<b>Local Communities</b>	
413-1	Operations with local community engagement, impact assessments, and development programs	61-67, 84
<b>414</b>	<b>Suppliers Social Assessment</b>	
414-1	New suppliers that were screened using social criteria	47, 48



# SASB Iron & Steel Producers Content Index

Topic	Accounting metric	Unit of measure	Code	Page
<b>Greenhouse Gas Emissions</b>	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)	EM-IS-110a.1	41, 80, 81
	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, 11, 29-33, 81
<b>Air Emissions</b>	Air emissions of the following pollutants: (1) CO <sub>2</sub> , (2) NO <sub>x</sub> (excluding N <sub>2</sub> O), (3) SO <sub>x</sub> , (4) particulate matter (PM <sub>10</sub> ), (5) manganese (MnO), (6) lead (Pb), (7) volatile organic compounds (VOCs), and (8) polycyclic aromatic hydrocarbons (PAHs)	Metric tons (t)	EM-IS-120a.1	35, 81
<b>Energy Management</b>	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	EM-IS-130a.1	81
	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	Gigajoules (GJ), Percentage (%)	EM-IS-130a.2	81
<b>Water Management</b>	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m <sup>3</sup> ), Percentage (%)	EM-IS-140a.1	39, 40, 81
<b>Waste Management</b>	Amount of waste generated, percentage hazardous, percentage recycled	Metric tons (t), Percentage (%)	EM-IS-150a.1	36-38, 81
<b>Workforce Health &amp; Safety</b>	(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	21, 80
<b>Supply Chain Management</b>	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	47
Activity Metric		Unit of measure	Code	Page
Raw steel production, percentage from: (1) basic oxygen furnace processes, (2) electric arc furnace processes		Metric tons (t), Percentage (%)	EM-IS-000.A	80
Total iron ore production (*)		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 2020 was approximately 115,000 tons.



# TCFD Content Index

Disclosure		Page
<b>Governance</b>	a) Describe the board's oversight of climate-related risks and opportunities.	10, 11, 69
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	10, 11, 69
<b>Strategy</b>	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	10, 11
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	10, 11
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	10, 11
<b>Risk Management</b>	a) Describe the organization's processes for identifying and assessing climate-related risks.	70, 71
	b) Describe the organization's processes for managing climate-related risks.	70, 71
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	70, 71
<b>Metrics and Targets</b>	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	80, 81
	b) Disclose Scope 1, 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	80, 81
	c) Describe targets used by the organization to manage climate-related risks and opportunities and performance against targets.	10, 11

# Sustainability Performance Indicators

Indicator	Unit	2018	2019	2020
<b>PRODUCTION</b>				
Cast steel (100% electric arc furnace)	Million tons	3.3	2.9	1.8
Seamless pipes	Million tons	2.8	2.6	1.9 <sup>(1)</sup>
Welded pipes	Million tons	0.8	0.7	0.3
<b>SAFETY</b>				
Investments in health and safety	USD million	21	28	21
Safe hours held	Hours	51,000	55,000	36,000
Injury Frequency Rate <sup>(2)</sup>	Employees and contractors	4.2	3.1	2.8
	Employees	4.4	3.5	3.1
	Contractors	3.6	2.4	2.0
Lost Time Injury Frequency Rate <sup>(3)</sup>	Employees and contractors	1.8	1.1	1.1
	Employees	1.6	1.0	1.1
	Contractors	1.9	1.2	1.1
Major Injury Frequency Rate (excluding fatalities) <sup>(4)</sup>	Employees and contractors	0.53	0.26	0.27
	Employees	0.58	0.29	0.32
	Contractors	0.41	0.19	0.10
Fatalities as a result of work-related injury	Employees number	2	0	0
	Employees rate <sup>(5)</sup>	0.04	0	0
	Contractors number	0	0	0
	Contractors rate	0	0	0
Near Miss Frequency Rate <sup>(6)</sup>	Employees and contractors	21	18	16
	Employees	25	21	17
	Contractors	11	12	11
<b>ENVIRONMENT</b>				
Investments in environment and energy savings	USD million	15	32	11
<b>Emissions</b>				
<b>Greenhouse gas emissions</b>				
<b>CO<sub>2</sub> emissions from sites with steel shops</b>				
Scope 1 emissions	CO <sub>2</sub> million tons	1.8	1.6	1.0
Scope 2 emissions	CO <sub>2</sub> million tons	0.8	0.7	0.3 <sup>(7)</sup>
Scope 3 emissions	CO <sub>2</sub> million tons	1.5	1.2	0.6
Intensity	Ton CO <sub>2</sub> /ton cast steel	1.2	1.2	1.1

<sup>(1)</sup> 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.

<sup>(2)</sup> Number of accidents with and without lost days (not including First Aid) per million hours worked.

<sup>(3)</sup> Number of accidents with lost days per million hours worked.

<sup>(4)</sup> Number of major accidents per million hours worked.

<sup>(5)</sup> Number of fatalities per million hours worked.

<sup>(6)</sup> Number of incidents per million hours worked.

<sup>(7)</sup> Scope 2 emissions are net of sale of energy from our Dalmine power generation facility amounting to 0.1 CO<sub>2</sub> million tons. Gross CO<sub>2</sub> emissions without netting sale of energy amounted to 0.5 CO<sub>2</sub> million tons.

Indicator	Unit	2018	2019	2020
<b>CO<sub>2</sub> emissions from all sites</b>				
Scope 1 emissions	CO <sub>2</sub> million tons	2.0	1.8	1.1
Scope 2 emissions	CO <sub>2</sub> million tons	0.9	0.9	0.4 <sup>(8)</sup>
Scope 3 emissions	CO <sub>2</sub> million tons	3.0	2.2	1.3
Intensity	Ton CO <sub>2</sub> /ton steel cast/processed	1.4	1.3	1.3
Intensity from all sites vs. 2018	%	–	–	-8
Scope 1 emissions from all sites covered under emissions-limiting regulations <sup>(9)</sup>	%	–	–	93
<b>Air emissions</b>				
Particulate material emissions	g/ton product	40	33	11
<b>Energy management</b>				
Total energy consumed	Terajoules (TJ)	–	–	31,177
Total electricity consumed	TJ	–	–	11,958
Total fuel consumed	TJ	–	–	19,219
-of which natural gas	%	–	–	93
-of which coal	%	–	–	6
-of which other	%	–	–	1
Energy intensity from sites with steel shops	Gigajoules (GJ)/ton cast steel	18.9	19.0	17.0
<b>Water management</b>				
Water withdrawal <sup>(10)</sup>	Million m <sup>3</sup>	72.5	59.5	32.9
-of which surface	%	–	–	63
-of which subsurface	%	–	–	30
-of which network	%	–	–	7
Intensity of water withdrawal at all sites	m <sup>3</sup> water/ton pipe	20	18	17
Intensity of water withdrawal excluding Siderca	m <sup>3</sup> water/ton pipe	5	6	7
Estimated water consumed at all sites	m <sup>3</sup> water/ton pipe	3	3	4
Water withdrawal from high or extremely high baseline water stress	%	–	–	1.4
<b>Waste Management</b>				
<b>Co-Products and waste</b>				
Material efficiency at sites w/steelshops	%	98.7	98.4	99.0
Residue & co-products reuse or recycle at all sites	%	81.2	81.7	91.6
Waste disposal at all sites	%	11.4	10.3	8.4

<sup>(8)</sup> Scope 2 emissions are net of sale of energy from our Dalmine power generation facility amounting to 0.1 CO<sub>2</sub> million tons. Gross CO<sub>2</sub> emissions without netting sale of energy amounted to 0.6 CO<sub>2</sub> million tons.

<sup>(9)</sup> Includes emission trading systems and carbon tax whether implemented or under implementation.

<sup>(10)</sup> At tubular production and processing sites (including steel shops).

Indicator	Unit	2018	2019	2020
<b>HUMAN RESOURCES</b>				
<b>Employees at year-end</b>				
Shop floor	People	17,126	17,103	14,063
Professional	People	5,841	6,097	4,965
Total employees (full-time)	People	22,967	23,200	19,028
Trainees (part-time)	People	364	475	314
<b>Professional employees by gender</b>				
Male	People	4,163	4,382	3,563
Female	People	1,678	1,715	1,402
Male	%	71	72	72
Female	%	29	28	28
<b>Senior managers by gender</b>				
Male	People	974	1,008	853
Female	People	119	125	125
Total	People	1,093	1,133	978
Male	%	89	89	87
Female	%	11	11	13
<b>Age ranges</b>				
Employees under 30	People	5,462	5,193	3,350
– of which female	People	763	746	502
Employees between 30 and 50	People	13,640	14,015	12,384
– of which female	People	1,279	1,275	1,118
Employees over 50	People	3,865	3,992	3,294
– of which female	People	280	295	224
Average age of workforce	Years	39	40	40
<b>Age ranges for professional employees</b>				
Professionals under 30	People	1,274	1,315	899
-of which female	%	38%	37%	38%
Professionals between 30 and 50	People	3,597	3,756	3,300
-of which female	%	28%	27%	27%
Professionals over 50	People	970	1,026	766
-of which female	%	20%	20%	22%
<b>Training</b>				
Training hours per professional employee	Hours	46	57	37
Training hours per shop floor employee	Hours, including on the job training	128	122	68
Training hours per shop floor employee	Hours, excluding on the job training	43	46	22
Hours of training	Million hours	2.4	2.7	1.2

Indicator	Unit	2018	2019	2020
<b>Employees by nationality</b>				
Mexican	People	5,806	5,595	4,680
Argentine	People	5,568	5,546	4,507
Italian	People	2,154	2,149	2,026
Romanian	People	1,861	1,823	1,562
Brazilian	People	1,287	1,372	1,362
USA	People	1,900	1,731	1,188
Colombian	People	1,081	1,045	750
Indonesian	People	555	616	519
Canadian	People	951	705	510
Japanese	People	400	401	399
Others	People	1,404	2,217	1,525
<b>Senior managers by nationality</b>				
Argentine	%	37	37	37
Italian	%	17	16	17
Mexican	%	17	17	15
USA	%	6	5	5
Brazilian	%	4	5	5
Romanian	%	4	4	4
Canadian	%	2	2	2
Colombian	%	2	2	2
Japanese	%	2	2	2
Indonesian	%	1	1	1
Others	%	8	9	10
Number of nationalities represented in the employee population	Number	89	96	88
Employees covered by collective bargaining agreements	%	63	60	66
Resignation rate	% All employees	3.8	3.7	3.2
Resignation rates	% Professional employees	5.5	4.7	4.5

Indicator	Unit	2018	2019	2020
<b>COMMUNITY</b>				
Education investment	USD millions	7.4	8.1	5.1
COVID-19 fund	USD millions	–	–	6.2
Other community investment	USD millions	4.3	3.6	1.4
Total community investment	USD millions	11.7	11.7	12.7
Technical Gene	N° of students	2,650	3,774	1,131
Technical Gene	N° of teachers	114	126	102
AfterSchool Program	N° of students	1,114	1,257	1,473
Roberto Rocca Education Program- University & PhD	N° of students	458	432	414
Merit Awards Program	N° of students	1,195	1,606	1,335
<b>ECONOMIC AND FINANCIAL</b>				
Net sales	USD millions	7,659	7,294	5,147
Operating income (loss)	USD millions	872	832	(663)
EBITDA	USD millions	1,536	1,372	638
EBITDA margin	% of net sales	20%	19%	12%
Net income (loss) attributable to owners of the parent	USD millions	876	743	(634)
Capital and reserves attributable to owners of the parent	USD millions	11,783	11,989	11,263
Net cash provided by operating activities	USD millions	611	1,528	1,520
Capital expenditures	USD millions	349	350	193
R&D investments	USD millions	63	61	42
Dividends	USD millions	484	153	248
Net cash position	USD millions	485	980	1,085
Return on equity <sup>(11)</sup>	%	8%	6%	-5%
Return on capital employed <sup>(12)</sup>	%	8%	7%	-6%
FCF Margin	% of net sales	3%	16%	26%

<sup>(11)</sup> Net income (loss) attributable to owners of the parent/  
Average equity attributable to owners of the parent.

<sup>(12)</sup> Operating income (loss)/ (Average equity attributable  
to owners of the parent – Net cash).

# Corporate Information

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## **Registered Office**

26, Boulevard Royal  
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(352) 26 47 8978

## **PRINCIPAL OFFICES**

### **Argentina**

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