

# Sustainability Report 2014

# Index

**04** Chairman's Letter

**06** QHSE Policy

**08** Health, Safety and Environment

**24** Innovation

**30** Human Resources

**40** Community Development

**50** Governance and Financial Indicators

# Tenaris

Tenaris is the leading global manufacturer and supplier of tubular products and services used in the drilling, completion and production of oil and gas, and a leading supplier of tubular products and services used in process and power plants and in specialized industrial and automotive applications.

Through our integrated global network of manufacturing, R&D and service facilities, we are working with our customers to meet their needs for the timely supply of high performance products in increasingly complex operating environments.

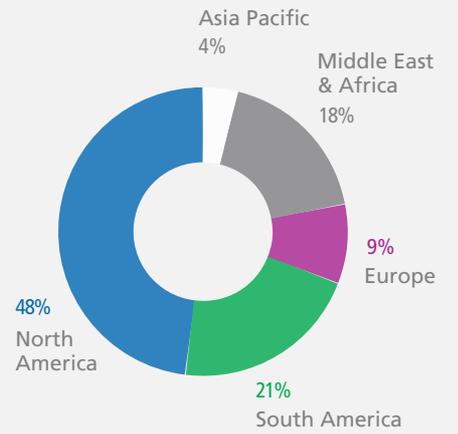


**Integrated Quality  
(ISO 9001:2008) and Health,  
Safety and Environment  
(ISO 14001 - OHSAS 18001)  
management systems.**



- Manufacturing Centers
- Service Centers
- R&D Centers
- Commercial Offices

Sales by Region



Leading global market position in pipes and tubes used in oil and gas drilling (OCTG)

Top customers

- Apache
- Aramco
- Chevron
- CNRL
- ConocoPhillips
- ENI
- ExxonMobil
- Noble
- Oxy
- Pemex
- Petrobras
- Pioneer
- Shell
- Total
- YPF

# Chairman's Letter

For several years, we have published a report on our safety and environmental performance. This year, we are extending the scope of the report to provide a more integral vision of the actions we are taking to improve the long-term sustainability of our business and the communities where we operate. These actions reflect the industrial values and purpose that have governed and sustained our company over the past 60 years.

Our safety indicators have been improving, with the rate of accidents resulting in injuries declining 45% over the past four years. The safety of our employees, our contractors and visitors is a constant and absolute priority. In recent years, we have introduced a series of routines, aimed at increasing employee awareness and engagement in safety issues, improving training and identifying safety risks.

In 2014, we reinforced those safety routines. In addition to our Safe Hour meetings, where management walks the factory floor on a weekly basis to discuss safety issues and ideas for improvements with employees at all levels, we established regular meetings with our sub-contractors to share our safety-first priorities, strengthened a communications campaign throughout the company centered on 12 basic safety rules and extended our Safestart training program. The Safestart program was first introduced in our Conroe mill in the U.S. in 2011 and aims to encourage personal responsibility for safety and reduce injuries on and off the job by focusing on risk perception. We will continue to focus on improving our safety performance, which also forms an essential element of our positioning in the eyes of our customers and the communities where we operate.

Our products are used in complex operating environments where any failure could have serious consequences in terms of safety and the environment as well as costs for our customers. Our challenge, therefore, is to ensure absolute quality and reliability for all our products and services, and to design and test new products to the most exacting standards to help our customers reduce risk in their operations. Over the past two years, we have introduced new premium connection and connector products for the most critical deepwater and HPHT (high pressure, high temperature) applications, which have been recognized as providing high quality solutions for operating in these environments. In addition, our Dopeless® technology, applied on connecting threads in place of standard lubricants, is increasingly recognized as one which establishes a new standard for safer, more cost-effective drilling operations with reduced impact on the environment.

We are committed to minimizing the impact of our operations on the environment and surrounding communities. The majority (70%) of our steel is produced using recycled steel scrap and in 2014 we reached a 90% rate for the reuse and recycling of the residues from our operations. To minimize greenhouse gas emissions, we have implemented a major program to reduce energy consumption in our operations. Over the past five years, CO<sub>2</sub> emissions per ton of products have declined by 14% in our mills despite a more energy-intensive product mix. Our new facilities are designed and constructed with advanced environmental and safety factors built in. The design for our Bay City seamless pipe mill was qualified by the Texas Commission for Environmental Quality as a minor source of emissions, and its construction specifications are consistent with those required for a LEED (Leadership in Energy and Environmental Design) certification from the U.S. Green Building Council.

Since its creation in 2005, TenarisUniversity has been at the center of our employee training and development efforts and has positioned Tenaris as a leader in corporate education. Today, it has its own facilities in many Tenaris plants and has created more than 1,500 proprietary courses in its six schools, covering topics for both salaried and hourly employees. It provides more than 1.2 million hours of training annually, accounting for 2.3% of the total number of hours worked. With a mandate to adopt the most advanced training techniques using tools adopted for the web, we have become an active participant in edX, the open, online learning initiative founded by Harvard and MIT.

Education is a fundamental value for Tenaris, an essential component of an industrial culture that identifies progress with that of the communities where we operate, providing a factor for integration and social mobility. In recent years, we have substantially increased our funding and support for education initiatives and made a major commitment to strengthen technical education in the communities where we operate with an investment in the Roberto Rocca Technical School in Campana, Argentina. With a remit to produce content and teaching techniques to strengthen public and private technical education beyond its immediate community, the school has combined with TenarisUniversity to produce, using the edX platform, a MOOC (Massive Online Open Course) – an Introduction to Computer Numerical Control – aimed at young technical students. Over 4,000 participants have enrolled in the course from 100 different countries with a 22% completion rate and a very high rating, well above the average of 5% for MOOCs in general.

We consider that the actions and programs described in this report, together with our economic and financial performance, all contribute to strengthen and sustain our company. In the coming years, as our customers reduce their investments and seek to minimize the costs of their operations without compromising safety and environmental standards in response to a more challenging market environment, our industry will be under intense pressure to show the value of its operations in all aspects.

Sincerely,



Paolo Rocca

# Quality, Health, Safety and Environment Policy

Tenaris aims to achieve the highest standards of Quality, Health, Safety and Environment, incorporating the principles of sustainable development throughout its worldwide business.

Tenaris identifies the health and safety of its employees, contractors and visitors, the satisfaction of its customers, the protection of the environment and the development of the communities where it has its operations as integrated key drivers of its business; the entire organization is oriented towards achieving these goals openly and transparently.

Quality, Health, Safety and Environment management and risk assessment fundamentals are integrated in all business processes.

Management is responsible and accountable for achieving excellence in Quality, Health, Safety and Environmental performance for successful business results.

Tenaris is committed to training all its employees in the appropriate use of its Quality, Health, Safety and Environment management systems, strengthening its management through updating of professional and managerial skills, fostering diversity, emphasizing employee evaluation and motivation and complying with the ethical principles established in its Code of Conduct.

**Nothing is more important than the health and safety of everyone who works for us and uses our products**

All injuries and work-related illnesses can and must be prevented  
Working safely is a condition of employment

**Quality is our main competitive advantage**

Requirements and expectations of our customers must be satisfied  
Differentiation is achieved through operational excellence and development of innovative and reliable products and services

**We are committed to developing a long-term sustainable business**

Preventing pollution and minimizing the environmental impact of our operations  
Making the most efficient use of natural resources and energy

Tenaris recognizes the importance of implementing this policy throughout its Quality, Health, Safety and Environment management systems, covering the entire supply chain from suppliers to customers and the proper and efficient use of its products in accordance with their agreed specifications. Tenaris commits to comply with applicable legal requirements and all other requirements relating to quality, health, safety and environment issues to which it subscribes.

Tenaris communicates this policy throughout its organization, trains its employees in the appropriate use of its Quality, Health, Safety and Environmental management systems and engages them in the regular setting, measuring and revision of objectives.

Tenaris undertakes to keep this policy updated, to implement and maintain its management system, and continuously improve its Quality, Health, Safety and Environment performance.

July 2014



Paolo Rocca  
Chief Executive Officer

## Key indicators 2010-2014

### Values that translate into facts

This report presents the way we work and a series of indicators that measure our performance in improving the sustainability of our business activities. We work every day to see our long-term management approach is reflected in these indicators.

Health, safety and environment are at the core of Tenaris's values, as is reflected in our QHSE policy. This document, updated in July 2014, defines an integrated management vision for quality, health, safety and the environment based on sustainability criteria that takes account of the entire supply chain, our employees and the communities where we have our operations.

Tenaris is committed to building a culture of transparency and integrity, based on ethical behavior and compliance with the law. Building lasting relationships with our employees, our customers, our suppliers and contractors in an open and transparent way is an integral part of our values. We believe this is essential for the long-term sustainability of our activities in an increasingly competitive market environment.

Our Injury Frequency Rate has improved by

# 46%

between 2010 and 2014

The CO<sub>2</sub> emissions per ton of production have gone down by

# 14%

between 2010 to 2014

Total economic value generated (2014):

# USD 10.4 billion

Growth in shareholders' equity

# 28%

between 2010 and 2014

Total investment in community projects (2011-2014):

# USD 74.6M

The average annual training hours for our hourly employees between 2010 and 2014 has gone up by

# 21%

The annual average training hours for our salaried employees.

# 58



# Health, Safety and Environment

The health and safety of employees and protection of the environment are at the core of Tenaris values.

# Health Safety and Environment

## An integrated management approach

Health, safety and environment are at the core of Tenaris values. Nothing is more important than the health and safety of everyone who works in our facilities and uses our products and services. The entire organization is oriented towards achieving the goal of zero accidents in a transparent manner. Environmental protection constitutes a commitment throughout Tenaris's activities, as the company is determined to minimize the environmental footprint of its operations and products.

Tenaris is committed to the continuous improvement of its Health, Safety and Environmental performance. To achieve this goal, we rely on an integrated Health, Safety and Environment (HSE) Management System and the adoption of best available technologies for our new or modified production lines.

Our QHSE Policy was updated during 2014. The new text of the policy expands some of the original's main concepts and also introduces new notions like diversity, innovation and risk evaluation. It consolidates, within a single document, our determination to obtain results of the highest quality in our products and processes, while caring for the health and safety of our people and for the environment.

Consistent with the principles of sustainable development, our HSE Management System follows the guidelines of international standards, such as ISO 14000 and OHSAS 18000. It is based on a set of corporate procedures that provides the rules and guidelines for its implementation, maintenance and improvement. We aim to complete the certification of our HSE Management System in accordance with these international standards

throughout our major facilities by the end of 2015. The certification process gained momentum in the last two years. Our Romanian and Italian sites, already with their health and safety management system certified, continued the certification of ISO 14001 standard; our main sites—Siderca in Argentina, Tamsa in Mexico, Confab in Brazil, TuboCaribe in Colombia, some of our sites in the USA, China, Indonesia and Saudi Arabia— have now completed their certifications according to both standards. By the end of 2014, 78% of our company employees were working at certified production sites.

We apply best available technologies in the design of our new production lines integrating HSE concepts to improve our performance. This approach was firmly established with the rolling mill we inaugurated in 2011 in Tamsa and is now being applied in the design and construction of our Bay City mill in Texas and also in the mill expansion in Cartagena, Colombia. Also, a new OCTG premium threading line has been completed at our mill in Zalau, Romania, which is a model for future premium threading lines and for the revamping of old ones. The line was designed to minimize exposure to any health and safety hazards, and to minimize emissions and consumption by using low Volatile Organic Compound (VOC) water-based varnish with high efficiency application systems, and by implementing energy efficient equipment throughout the entire process.

We have performed several investments related to HSE during the past years in different areas: energy efficiency, improvements in emissions capture and treatment, water and waste water management and noise reduction. Regarding health and safety, the main targets are related to steel shop improvements, pipe yards, machine guarding and fire prevention measures. The chart on this page shows the evolution over the last five years of approved HSE investments. Projects included on the graph are still in process or already concluded depending on their complexity.

# HSE Indicators

## Tenaris Employees Working in Certified Mills

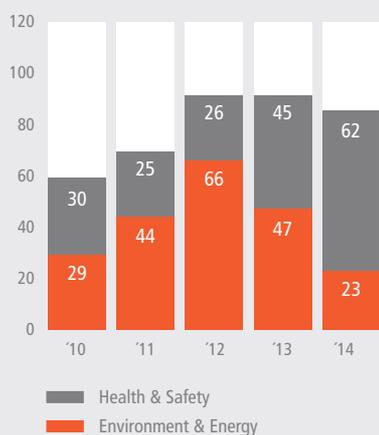
as percentage of Tenaris headcount



Headcount includes Own + contractors

## Investment in HSE

(in million USD)



Tenaris applies best available technologies in the design of new production lines, integrating HSE concepts to improve performance.

## Safety

Our focus over the last two years has been on reinforcing a series of initiatives launched in recent years to strengthen awareness, compliance with procedures, as well as on the standardization of practices and technologies to minimize exposure to safety hazards. Our Injury Frequency Rate improved both in 2013 and 2014 compared to previous years, overall a 20% decrease vs 2012. However, the Lost Time Injury Frequency Rate worsened in 2014. Regrettably, we suffered one fatality in 2014, when a contractor employee fell from heights during a programmed repair in Metalmecánica, one of our sites in Argentina.

The “Safe Hour” program, which has been implemented in all Tenaris facilities, formalizes a routine one-hour walk twice a week through the mills by top and middle management of the operative areas. It has the aim of engaging in dialogues with workers on safety issues and discussing with them any safe or unsafe behavior and conditions that might exist in the workplace.

Two years after the launch of the program, it is proving to be an effective tool to achieve greater awareness and a safety-first culture in Tenaris. In 2014, we conducted 45,351 “Safe Hour” routines and, thanks to the on-site conversations during the routines, 15,115 observations were recorded, 26,356 positive feedbacks given to workers and 15,014 improvement commitments obtained.

A survey was conducted to measure opinion about the “Safe Hour” program among hourly employees. The results were encouraging: 88% of respondents said they considered the “Safe Hour” to be an opportunity for an open discussion in which they could freely express their opinions and contribute to their own safety and that of their colleagues. But the most significant feedback was that 70% responded that their behavior and habits had changed as they became more aware of safety issues at work.

To further raise awareness and compliance with safety rules, we prepared a set of 12 basic safety rules as defined standards for our activities, and launched a company-wide communications campaign to make it easy for employees to identify and apply them.

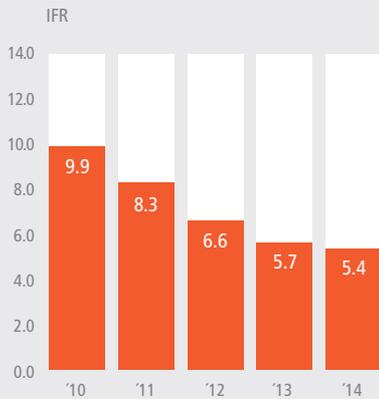
For our office-based staff, meanwhile, we developed a “Safety at the Office” video training course, which has been completed by 90% of our salaried employees. The video focuses on raising awareness about potential risks employees face when working at an office and presenting best practices.

We continued with the implementation of Safestart, a safety training program focusing on risk perception and designed to reduce injuries both on-the-job and off-the-job by encouraging personal responsibility for safety. Started in Conroe in 2011, the program is being extended to others mills: Siderca, Algoma and Prudential in Canada, Dalmine, Tamsa and McCarty. Around 2,500 people have already participated in the program.

We are implementing a process safety management and catastrophic risk analysis, in order to prevent unexpected events during the course of our industrial processes that could have a serious effect on our people, our mills and the environment. Process safety management is focusing on the design and engineering of facilities, equipment maintenance, effective alarms and control points, procedures and training.

# Safety Indicators

## Injury Frequency Rate



**Methodology:** Number of accidents with and without lost days (not including First Aid) per million hours worked. Values refer to own personnel plus contractors from 2007 onwards

## Lost Time Injury Frequency Rate



**Methodology:** Number of accidents with lost days per million hours worked. Values refer to own personnel plus contractors from 2007 onwards.

In order to share our safety-first culture with third-party contractors working at our sites, we have established regular meetings, which have been implemented in most of the regions where we operate. A system to qualify and verify the performance of our contractors is in place, and we continue working to involve and integrate them further into our management system through induction courses. For example, we held a meeting with contractors before the last annual maintenance shut-down in Italy, which gathered 1,200 people. The meeting conveyed our expectations about HSE and addressed procedures and critical situations. Each contractor was required to have a Health and Safety Supervisor to perform inspections and increase awareness through “Safe Hour” participation and other engagement activities.

We are working with different process areas in defining task force groups to improve our management on key topics. These topics include the detection and avoidance of water leakages in the EAF furnaces; the management and control of hazardous energy (lockout/tagout) or the control of overhead cranes with maintenance people. As a result, action plans are defined, including procedures, training and investments.

We will continue to focus on safety, convinced that the measures we are implementing, in addition to increased employee awareness, will be reflected in continuing improvements in our indicators and allow us to consolidate a “safety first” culture in our company.

## Health

We are committed to providing a healthy workplace, equipment and technologies through a comprehensive occupational health and hygiene program.

We are developing the basic tools for a new Health Management System, launching a new Tenaris health protocol to ensure that all employees receive adequate and regular medical controls.

Our occupational physicians were closely involved in revising the risk analysis by interviewing our workers, evaluating our facilities and performing routine examinations by means of a standardized protocol. This allowed us to monitor our employees' health, identify problems at workplaces for all job positions, and then assess the effectiveness of the actions taken.

We use videos, brochures and other training and communications materials to increase awareness on healthy lifestyles, common illnesses such as cancer, cardiovascular related problems, obesity, etc.

We defined minimum health requirements for the construction and operation of new industrial sites. We combined the experience of our engineers with the introduction of innovative international techniques to create a work environment with a primary focus on our employees.

We have also defined global guidelines related to indoor air quality, noise, vibrations, etc. Noise studies have been performed in all our sites; and indoor air quality has been deeply investigated in two of our steel mills, focusing on the proper identification of required actions.

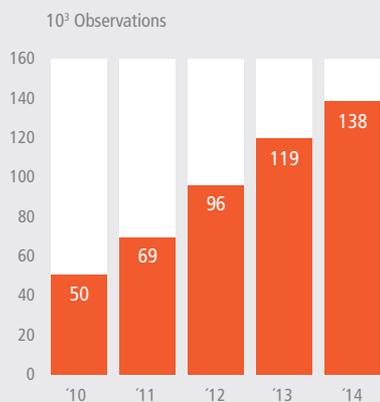
With the support of an ergonomic team, we carried out the assessment of ergonomic risks for all job positions at our Confab facilities in Brazil, identifying specific measures needed. The Confab experience is serving as a model for the rest of the company.

We have also improved our IT tool for HSE management (called Tenaris Safety and Environment, TSE), in order to integrate risk analysis with a health protocol. This new tool allows occupational physicians to easily review the results of environmental monitoring and the risks associated with the activities carried out by employees during their occupational history. The physician will be able to use this tool to correlate potential pathologies with the workplace and thus provide input for revising certain hazard controls.

We are following specific indicators to measure health performance. With the support of the new TSE, these indicators will provide day-by-day information on medical check-ups, fostering continuous improvement.

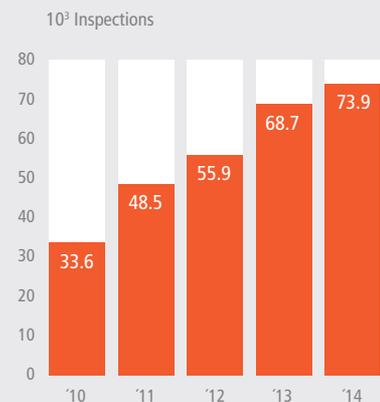
## Safety Indicators

### Observations evolution



Source: Internal tool reported HSE observations

### Inspections recorded evolution



Methodology: Internal tool reported HSE inspections.  
Safe Hour not included.

## Reducing noise

Dalmine in Italy received the certification from local authorities for the completion of the project to decrease noise levels at the community. The project involved the investment of EUR 3M during four years and consisted of the reduction of noise at the sources and the construction of barriers around the perimeter of the mill.

Many of our sites are located near residential areas. The communities historically grew around the mills, as they are sources of employment and activity. We are now working on many sites in order to minimize noise levels at the sources improving both sides on this way: impact on our employees on occupational health point of view and the nuisance that the normal operation of a mill creates in the daily life of our neighbors.

## Environment

In terms of environment, our objective is to develop a sustainable business over the long term, as stated in our QHSE Policy, by preventing pollution, minimizing the environmental footprint of our operations and products, and by making the most efficient use of natural resources and energy.

Within the World Steel Association (worldsteel), Tenaris is signatory of the Sustainability Policy and the Sustainability Charter.

To reduce our energy consumption and environmental footprint, we are investing in a large number of projects at our industrial facilities throughout the world. Progress is being made in many areas such as emissions, water and waste management and noise reduction.

We also invest in research and development projects aimed at improving our environmental performance. Some of these projects involve switching to materials with a lower environmental and CO<sub>2</sub> footprint; finding new and innovative ways to handle waste products through recycling alternatives; studying our combustion process for energy efficiency enhancement; and finding specific solutions for waste-water treatment and consumption.

### Energy & Climate change

Global steel production accounts for nearly 7% of GHG man-made emissions, but steel is also essential for our daily life and used everywhere because its properties makes it one of the most versatile materials. Over the past 50 years the steel industry has reduced its energy consumption per ton of steel by 60%, according to worldsteel. Based on existing technology only incremental efficiency gains are possible. We are on this path implementing improvements based on the possibilities identified in our main mills.

We continue with our strategic projects devoted to reducing emissions and improving efficiency. Our focus is on energy efficiency and heat recovery, improvements in the use of resources and on the reduction of waste. All these objectives are tackled in different but integrated ways.

Our energy strategy is built on investments and improvements defined by “continuous improvement operational groups” focused on process, equipment changes, training and communications programs, as well as standardization of practices.

For the last two years, improvements and investments totaling around USD 20 million have been concluded or are about to finish, oriented to increase energy efficiency. The list includes improvement in furnaces in Siderca, Silcotub and Algoma, as well as actions in different areas in order to achieve more efficiency in our electricity consumption. The results in terms of resource-use savings for these main projects is equivalent to an estimated 70.000 MWh/year in electricity consumption and 25 million Nm<sup>3</sup> of natural gas: an estimation of more than 100.000 tons of CO<sub>2</sub> emissions saved per year.

# Environmental Indicators

## Tenaris Steel Mills Energy Intensity



**Methodology:** measured in GJ/ ton steel worldsteel methodology.  
**Boundaries:** steelmaking mills, including all other processes on site.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine.

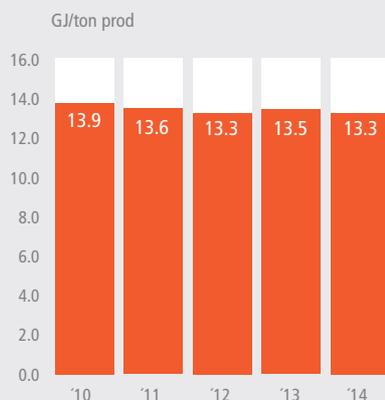
## CO<sub>2</sub> Emissions Steel Mills



- Direct emissions
- Electricity upstream emissions
- Other upstream emissions

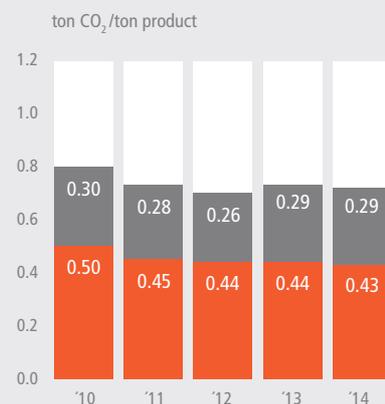
**Methodology:** measured in ton CO<sub>2</sub>/ ton steel worldsteel methodology.  
**Direct emissions:** CO<sub>2</sub> emissions related to steel production and other processes included at the site.  
**Purchased electricity:** upstream CO<sub>2</sub> emissions related to electricity production, using a world average emission factor of CO<sub>2</sub>/MWh generated.  
**Indirect emissions:** other upstream CO<sub>2</sub> emissions related to production of raw materials and fuels.  
**Boundaries:** steel mill and other processes on site, including power generation at steelmaking sites only.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine.

## Tenaris Energy Intensity



**Methodology:** measured in GJ/ ton product based on electricity and gas consumption at each site.  
**Boundaries:** Tenaris steel and pipe production sites.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine SPA. Siat VA; Siat VC; Confab Tubes, Hickman, Conroe, Republic Conduit, Algoma, Prudential, TuboCaribe, NKKTubes, SPIJ, Silcotub

## CO<sub>2</sub> Emissions Tenaris Sites



- Direct emissions
- Purchased electricity

**Methodology:** measured in tn CO<sub>2</sub>/ tn product.  
**Direct emissions:** CO<sub>2</sub> emissions related to steel production and/or other processes included at the site.  
**Purchased electricity:** upstream CO<sub>2</sub> emissions related to electricity production, using a world average emission factor of CO<sub>2</sub>/MWh generated.  
**Boundaries:** All tube and steelmaking sites. For sites without steelmaking processes, gas and electricity consumption contributes to the indicator.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine SPA. Siat VA; Siat VC; Confab Tubes, Hickman, Conroe, Republic Conduit, Algoma, Prudential, TuboCaribe, NKKTubes, SPIJ, Silcotub.

Dalmine is about to conclude a USD 5M investment for the recovery of remaining heat in gas fumes from the rotary furnace to produce steam. Siderca started the revamping of the intermediate furnace to improve efficiency in gas consumption. Also Siderca implemented an Expert Furnace System Optimization Process in both steel furnaces. By continuously measuring the process gases, it was possible to optimize the operative practice and control consumption to make the process more efficient. This improvement led to a 7% decrease in specific electricity consumption and 6% in related upstream CO<sub>2</sub> emissions in the steel process.

During 2015, Tubocaribe, our mill in Colombia is starting to operate a new heat treatment and finishing line. This new heat treatment will bring significant improvements on the efficiency of the mill as it replaces old inefficient furnaces.

The energy intensity rate at our steelmaking sites decreased slightly in 2014 compared to previous years. Taking all our sites into consideration, it has also seen a slight downward trend, showing the lowest value in 2014 in five years. CO<sub>2</sub> direct and related electricity emission values for this period show a similar evolution.

We participate in worldsteel's Climate Action Program, and have been recognized for the last 6 years for complying with CO<sub>2</sub> emissions reporting requirements, including submission of information and verification. The data collection program is a key part of the steel industry's global sectorial approach to climate change.

### Steel recycling

Steel can be recycled infinitely without losing any of its properties. Annually, 650 million tons of steel are recycled, making steel the most recycled material in the world. By recycling steel we also save iron, energy, coal and other materials, produce less CO<sub>2</sub> emissions and prevent useful material from ending up in landfill as waste. Tenaris uses electric arc furnaces and gas-based direct reduction processes to produce steel, which are considered efficient means of production with lower levels of CO<sub>2</sub> emissions.

Scrap use rate in our steel making process is in average 70% - a rate that has been kept in similar values over the last years. Around two million tons of scrap are recycled per year at our sites: all scrap from steel and downstream pipe production is collected and used, as well as post-consumer scrap.

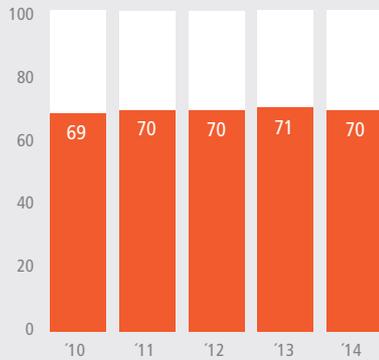
The recycled content of any steel product can range from 5 to 100%. Dalmine validated during 2014 its declaration of the recycled content in its products, reaching a minimum of 85.8% of post-consumer recycled material, according to the standard UNI EN ISO 14021.

Scrap recycling is one way to minimize the environmental footprint of our operations. We strongly support policies and activities that promote increasing steel recycling rates where we operate.

# Environmental Indicators

## Tenaris recycled steel use

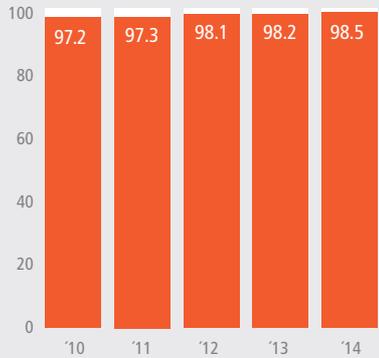
% scrap charged



**Methodology:** Values are calculated as tons of scrap present in the metallic load.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine.

## Tenaris material efficiency

%



**Methodology:** (liquid steel produced + by-products) / (liquid steel produced + by-products + waste). worldsteel methodology.  
**Waste:** all material sent to landfill and incineration.  
**By-product:** all material sent to reuse or recycling processes.  
**Boundaries:** steel mill and other processes on site including power plants.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine.

## Air emissions

Reducing air emissions is a priority for our Environmental Management System, as its potential impact is a primary environmental concern for our communities. Projects for reducing and controlling air emissions continue underway.

Among our activities, steelmaking is one of the most relevant processes in terms of air emissions, especially concerning particulate material. Silcotub is finishing the second stage of a USD 9M investment to increase the capacity of its capture and treatment system. Dalmine is also working on a project to further improve its capture and treatment system with a USD 12M investment, which will be finalized during 2015, while an additional USD 2M was invested this year to improve the capture and treatment of gas emissions from the ladle refractory drying process. An action plan was defined and implemented in Tamsa to decrease the level of emissions of particulate material in the steel mill stacks for a reduction of around 40% in the final months of the year. Our target is to foster improvements by defining local objectives to achieve best available technologies emission levels.

Nitrogen oxides (NOx) emission reduction is also part of our improvement plans, mostly by implementing changes in our furnaces through the use of low NOx burners to allow lower emission levels, better combustion and improved gas consumption efficiency. This plan started some years ago and continued in this period with modifications in Algoma Tubes and Siderca. Our new heat treatment plant in Colombia will improve significantly also on this front by replacing old, less efficient heat treatment facilities. The Bay City mill in the US will minimize NOx emissions by using the best technology in terms of emissions and also selective catalytic reduction to achieve even better results.

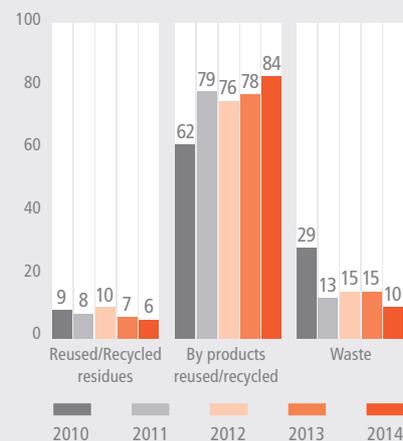
We are also looking at new lines for coating pipes, focusing on minimizing emissions of volatile organic compounds, mainly by switching to water-based products for varnishing, our main VOC source. New coating lines in the Silcotub, TuboCaribe and Bay City mills are following this design.

#### Residues, by-products and materials management

Steelmaking is a resource-intensive process that generates large volumes of residues and by-products. We monitor the use of materials at all our sites, as well as residue streams and by-products that result from our processes, aiming to reduce generation, reuse or recycling of materials. We are continually looking for effective ways to bring about more sustainable material management, investing in R&D projects to minimize residue generation or implement recycling practices.

## Environmental Indicators

Tenaris residues and by-products



#### Methodology:

**Residues:** includes all residues produced at the site, including hazardous ones. For reused/recycled, we include any internal or external process for reuse or recycling the material.

**By-products:** Steelmaking residues that are reused or recycled, internally or externally. Includes mill scale, slag, DRI fines and sludge and electric arc furnace dust. Internal scrap not included. All percentages are calculated comparing tons reused/ recycled to tons generated in the same categories and sites.

**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine, Siat VA, Siat VC, Confab, Hickman, Conroe, Republic Conduit, Mc Carty, Texas Arai, Algoma, Prudential, Tubocaribe, NKK Tubes, Silcotub.

The material efficiency indicator, calculated with worldsteel methodology, shows that the recycling rate at our steelmaking sites is almost 100%, as by-products are mostly reused or recycled, consistent with the trend from previous years.

Looking at Tenaris as a whole, in 2014 we reused or recycled 90% of our residues counting our main sites, internally or through a third party. The 4-year trend shows that most of our residues (nearly 80%) are in fact by-products and that landfill disposal is now at about 10-15% of the total. Our objective is to continue reducing waste while increasing their use as a product, thus we support all measures tending to facilitate reuse and recycling. Dalmine is an example with the use of Ecograin™, the electric arc furnace slag produced in our mill classified under EU regulations as a raw material that is used as aggregate for road construction in lieu of sand and gravel. In Dalmine a USD 9M investment in a treatment plant to recover boron from waste water started to operate. Boron is used in the rolling mill process: under this treatment, the salt is recovered from waste water and is available to be sold for recycling.



Our new mill in Bay City, Texas, has been designed to minimize its environmental footprint both during construction and on its future operation.

### Water Management

In our steelmaking and seamless tube production facilities, water management is a significant issue in terms of intake and discharge. Water is mainly used for cooling processes in the steelmaking mills and seamless tube mills. Welded pipe facilities have much lower water use rates.

Our sites have different industrial water systems, which result in noticeable differences in the amount of water intake per ton of product produced, absolute cubic meters used and also the source of the water. The situation of each site depends on the amount and quality of water available and on local regulations.

Our main mill in Argentina has, by far, the largest abstraction rate of surface water since it was designed based on very abundant local water availability, with an open water system, which is used mainly for cooling purposes in the steel and rolling processes. A first step investment is in the design engineering phase for a change in the way water is managed at the rolling mills. The project will allow the reuse of water from the rolling mills, improving the general management of the resource. The complete program will include steps for the management of storm water from the industrial system and the revamping of treatment plants in the mill.

Our new line in Colombia, an area with water scarcity, is designed to recycle all the water used; even adequately treated waste water from sanitary services will be used for watering green areas of the new site. The Bay City mill is also designed with an objective of recycling more than 95% of the water it will use, while waste water after treatment will be sent to a local waste-water treatment facility.

## Bay City



### A new mill and a milestone for Tenaris

The mill has been designed to minimize its environmental footprint by using best available technologies both during construction and on its future operation. The plant is being built following the specifications under the Leadership in Energy & Environmental Design (LEED) of the US Green Building Council. The company is working to seek the same certification for the project as it has for the newest rolling mill in Tamsa, Mexico.



**A number of best available technologies are included in the Bay City design:** nitrogen oxide emissions will be minimized by using selective catalyst reduction systems, while also applying the most advanced technology on burners in order to maximize energy efficiency; low volatile organic compounds water-based varnish for coating operations; a water system designed to have the lowest impact on local water resources. All these control measures to minimize air emissions allowed the project to be classified as a minor source of emissions, according to the US regulations, something unprecedented for a mill of this size. Particular attention is being placed on the plant's design in order to control the health hazards common in the steel industry, such as ergonomics, noise, emissions and heat stress.



# Innovation

We have established a high reputation for the quality and reliability of our products and for producing innovative solutions for the industry.

# Innovation

## Our Products and Services

We operate a global industrial system under a single quality management system, whose aim is to ensure that the same high levels of quality are maintained for all Tenaris products irrespective of the production facility in which they have been produced. Products are manufactured in accordance with the highest industrial standards and our quality management system, based on the ISO 9001 and API Q1 specifications, assures that products comply with customer requirements from the acquisition of raw materials to the delivery of the final product, and are designed to ensure the reliability and improvement of both the product and the processes associated with manufacturing operations.

Over time, we have established a high reputation for the quality and reliability of our products, which is widely recognized among our customers as an important competitive advantage.

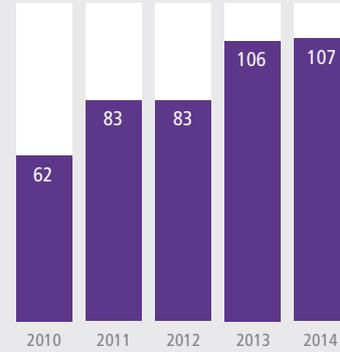
In addition to quality and reliability, our capacity for innovation and specialization of products and services enables Tenaris to maintain and improve its competitive positioning in local and global markets as well as to provide products and services that enable our customers to increase the sustainability of their operations.

Our investment in Research and Development has increased over the last five years, and exceeded USD100 million in the past two years.

## Research and Development

### Investment in R&D

(in million USD)



### **A global network for Research and Development**

R&D activities are primarily carried out at specialized centers located in Argentina, Italy, Japan and Mexico. In 2014 we inaugurated a fifth R&D center at Ilha do Fundao, Rio de Janeiro, Brazil. In these centers we have a total of 290 highly qualified researchers working on product and process development and testing. We also engage some of the world's leading industrial research institutions to solve the problems posed by the complexities of oil and gas projects with innovative applications. For example, in 2014, we signed an agreement with Texas A&M Engineering Experiment Station to enhance collaboration between the two organizations in areas related to R&D and human resources. In addition, we have a global team of 150 technical sales engineers who work with our customers to identify and propose solutions for particular oil and gas applications.

### **Challenges that inspire new products and technologies**

Our products have to provide structural integrity and leak-proof performance for oil and gas wells and flowlines in increasingly complex offshore and onshore operating environments.

Offshore developments have been systematically increasing for decades and today account for about 30% of overall exploration and production spending by oil and gas companies. Developments are taking place at ever greater depths, promoting technological innovation to help guarantee reliability and increase safety.

Deepwater projects are characterized by high risks, extensive difficulties, escalating costs and ecological sensitivity. Nowadays companies work in water depths of over 10,000 feet and with the true vertical depth of certain wells reaching more than 30,000 feet. This scenario calls for specialized products to stand up to HP/HT (high pressure and temperature) and corrosive environments.

Additionally, each well has specific characteristics and complexities; so customized solutions are critical to enhance productivity and running efficiency while addressing increased risk and environmental concerns.

New products not only must be tested according to ever more rigorous testing standards, multiple items must be delivered according to the customer's production schedule, making sure the material required is on hand when necessary.

Tenaris has a wide range of solutions to respond to deepwater challenges. Our high-quality products meet the most stringent international quality and testing standards, such as the API RP 5C5, and are often designed according to the specific requirements of our customers. In the past two years, we have significantly expanded our range of products in response to the challenges of more complex deepwater and HPHT operations and specific customer requirements for the Gulf of Mexico and the North Sea, providing enhanced performance options in integral, larger diameter and heavier wall products.

#### **Dopeless® technology for safer, cleaner and more reliable drilling operations**

For the past decade, Tenaris has pioneered the use of dope-free connections for sensitive operating environments such as offshore, arctic, jungle and desert areas as well as in operations where operating reliability is critical. Our Dopeless® technology was first introduced in the North Sea and is currently used by various operators in many different regions around the world.

This dry, multifunctional coating is applied to premium connections in a controlled, industrial process at our mills, and avoids the need for the use of thread and running compounds, which, in standard exploration and production drilling operations, have to be applied and removed manually in the field using significant quantities of water.

Dopeless® technology contributes to improving safety and the environmental impact of oil and gas operations by keeping working surfaces clean and non-slippery and being a zero-discharge technology. It reduces pipe handling operations and manpower requirements, further enhancing safety at the rig, while the thread protectors used are clean, dry and ready to be recycled and reused after the pipe is installed.

The reliability and ease of use of Dopeless® products has been amply demonstrated and compares favorably with products using standard thread compounds. This reliability contributes to operational efficiency as pipes can be installed in the well in less time with fewer rejects.



Our products are manufactured in accordance with the highest industrial standards of quality.



# Human Resources

With employees being the main source of our competitive advantage, we offer them a wide array of development tools with a global horizon.

# Human Resources

## Developing a global team

Formed from the alliance of three companies in Italy, Argentina and Mexico, Tenaris has since expanded primarily through acquisitions to become a global leader in its industry with a presence in over 30 countries around the world. Through these years, Tenaris has worked intensively to consolidate itself as a single global organization by standardizing processes and sharing knowledge throughout the company. This progress has been made possible by the contribution and commitment of our entire workforce, which has grown in its diversity and skills.

Our people are the principal source of our competitive advantage. As such, we offer employees a wide array of development tools and give them the chance to learn new skills and provide them with opportunities for professional growth with a global horizon. Our development and training programs are oriented to innovation and excellence, as we are dedicated to the provision of differentiated products and services and seek excellence in everything that we do.

The flagship of our employee development efforts is our corporate university, TenarisUniversity, which has designed 1,500 courses and delivers 1.2 million annual hours of training, both for salaried and hourly employees.

Created in 2005, TenarisUniversity designs job-specific curricula and development plans for employees. These plans are based on a unified academic structure that ensures employees receive the same high quality training regardless of their geographical location, as well as the specific skills they need for their jobs and career growth in Tenaris.

Standardization of knowledge and career development throughout the organization is key for the growth and consolidation of our company. While employee demographics show we continue to have a strong Latin core, the company is strengthening its global profile. We embrace and encourage diversity in all its forms: cultural, ethnic, geographic, gender and language, in the understanding that it enriches the organization and contributes to better results.

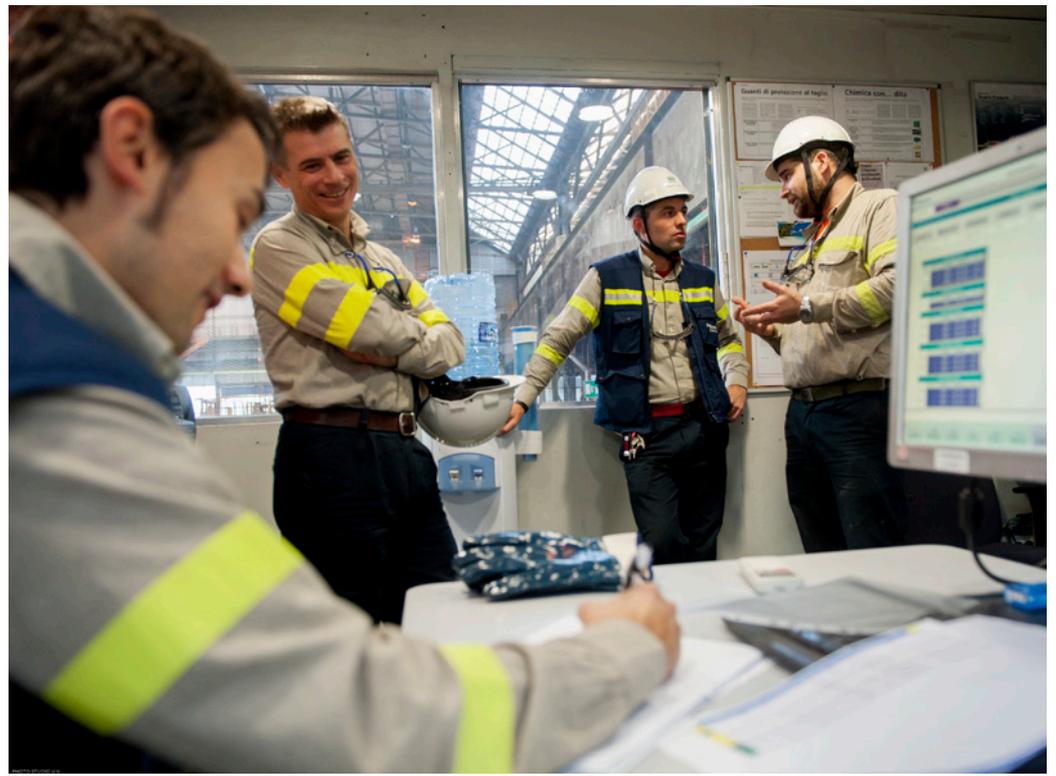
In 2008, we launched a Gender Diversity project with the aim of increasing the number of women in our management team and in our total workforce. Although the overall proportion of women in our management team has not yet increased significantly, we have raised awareness of the importance and benefits of gender diversity within the company and introduced a number of initiatives aimed at addressing issues that tend to limit the attraction and promotion of women. Slowly but surely, women are advancing in the highest ranks of the company.

In 2014, we expanded the scope of these efforts to cover other aspects of diversity, particularly cultural diversity and the development of more local talent in the countries in which we operate. To ensure that the widest group of internal candidates is considered for every open managerial position or rotation, we have also created a staffing committee comprising the company's top management. We see creating more diverse teams in terms of gender, culture and nationalities as a key to preparing Tenaris for the challenges ahead.

# Human Resources Indicators

## Total hourly and salaried employees

In thousands of people



Tenaris invests in its people and their development and strengthens policies and programs so that the company, as an integrated team, can better meet the challenges of global competition.

#### A long-term relationship

Tenaris's human resources policies and programs are designed to promote the attraction, development and retention of talented individuals from around the world over the long term. The company's philosophy is to grow from within by focusing on the continuous development and engagement of our people, which we view as a shared responsibility between the employee, supervisors and our human resources team.

Tenaris has established a number of programs to build and sustain this long-term relationship, covering from the early stages of each individual's career to the senior levels. Our corporate university, TenarisUniversity, is at the center of these efforts, providing career-long, structured training programs for all salaried and hourly employees (See TenarisUniversity box on page 37).

Tenaris's Global Trainee Program (GTP) is a strategic development tool that aims to develop promising entry-level professionals into the leaders of tomorrow. More than half of Tenaris's current managers and directors joined the company as participants of the GTP or its predecessor programs.

The two-year GTP program combines training, two different job assignments for each participant and structured programs for evaluation and support.

One of the highlights of the program is the month-long TenarisUniversity Induction Camp (TUIC), which brings together GTs from around the world to TU's campus in Argentina. The TUIC provides participants with a great opportunity for networking and learning about the company as well as teamwork.

TenarisUniversity also offers two special programs for more senior-level employees: the Management Development Program (MDP) for employees reaching their first supervisory position and the Advanced Management Program (AMP) for managers leading whole teams or key projects. These programs are a key part of our people's development path.

TenarisUniversity has also developed special week-long programs for those taking on leadership roles in our commercial and production teams and for more senior managers who want to develop their leadership skills.

In all these programs, there is strong participation by Tenaris's top management, starting from the CEO, as course instructors to ensure that the values and priorities of the company are effectively communicated and demonstrating the importance the company leadership gives to the development of our people.

For hourly employees we have developed career plans designed to help them build skills so that they can take on more complex tasks over time. Training materials are translated to the local language and classroom training is complemented by simulations and structured on-the-job training.

# Human Resources Indicators

## Salaried employees by gender

In thousands of people



## Managers by gender

In number of people



At the top, our TenarisUniversity building in Campana, Argentina, which hosts the TenarisUniversity Induction Camp for Global Trainees.

### Knowledge sharing

Formal training for our employees is complemented with widespread knowledge sharing across the organization. For that purpose, the company has and continues to deploy an array of new information and communication technologies to create an easily accessible platform for knowledge sharing.

In 2013, Tenaris updated its main Intranet tool that has been adopted by all areas in order to overcome geographic distances and knowledge gaps. This tool, the TenarisWorkplace, was revamped to make information easier to find, encourage collaboration and provide new support and services to employees via interactive and social media tools. In the last year, 62% of the company's salaried employee population actively used the new tool.

### Performance management

Tenaris's Performance Management Process (PMP) is designed to help employees assess their own progress, strengthen the supervisor-employee relationship and reward individual and group merit. The PMP is regularly updated to ensure it is aligned with Tenaris's business needs, industry best practices and recommendations made by employees in the company's biennial Employee Opinion Survey. The mid-term survey we conducted in early 2014 indicated that 69% of employees agreed that the PMP helped improve their performance.

Two years ago we introduced an upward feedback component, which allows employees to evaluate their supervisors. Last year we also introduced team objectives in employees' work plans in order to encourage shared responsibility in the outlining of goals and tasks.

## Human Resources Indicators

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

Participants per course

Year	AMP	MDP	TUIC
2010	109	163	165
2011	35	151	234
2012	47	119	170
2013	81	176	241
2014	79	255	233

AMP: Advanced Management Program

MDP: Management Development Program

TUIC: TenarisUniversity Induction Camp

### Tenaris Salaried Employees

Year	% approved workplans	% approved IDP
2010	85%	38%
2011	76%	41%
2012	86%	42%
2013	89%	51%
2014	98%	76%

IDP: Individual Development Plan

### Upward Feedback

Year	% of supervisors that received UF	% of employees who provided UF
2012	66%	40%
2013	76%	53%
2014	81%	56%

### Employee Opinion Survey Participation

Year	Target population	Rate of participation (%)
2008	6,817	80
2010	6892	76
2012	7,646	80
2014*	7,903	74

\* Mid-Cycle Survey

The PMP has become a pillar of the company's human resources processes. Nearly 100% of all salaried employees were evaluated in 2014; work plans were defined and approved for 98% and 56% of employees provided upward feedback.

Employees and supervisors work together to outline Individual Development Plans (IDPs). The number of IDPs approved has increased over the last five years to reach 76% of the salaried employee population in 2014.

Tenaris has also introduced a specially designed performance management process for hourly employees. In 2014, more than 50% of our hourly workforce, 10,000 employees, participated in this process.

#### Employee opinion

Tenaris recognizes that motivation is the key to building a highly efficient and innovative team and that this can be achieved by engaging people and giving them a say in decision-making.

Every two years, Tenaris conducts an opinion survey among its salaried employees to find out their main concerns and the areas in which the company can make improvements. An independent polling firm conducts the biennial Employee Opinion Survey (EOS) to guarantee transparency and confidentiality. Participation in the survey is voluntary and response rates have been in the range of 80% in each of the last editions. The next survey is scheduled for 2015.

The company's top management is actively involved in the deployment of the action plans prepared after the surveys. In 2012, the survey detected a strong correlation between employee engagement and the leadership abilities of the people in charge of each area. In order to tackle this issue, TenarisUniversity has revised the content of its curricula to place a stronger emphasis on leadership development.

While survey results since 2006 have demonstrated that the company has made significant strides in areas like performance management, supervision and performance management, and is performing well against benchmarks of other leading companies, one area where we still need to focus our attention is in making it easier for employees to balance their personal and professional lives.

Four years ago we began introducing new programs, adapted in accordance with each country's legal and cultural framework, for flexible work schedules, teleworking, half-day Fridays and part-time work for employees with young children. Many of our salaried employees participate in these programs and we continue to introduce new initiatives and extend their range geographically. Identifying and implementing other actions to address employees' work-life balance concerns forms a key part of our ongoing Opinion Survey action planning.

Tenaris has also introduced a more standardized format for surveying hourly employees, building on the individual surveys already employed in a number of our plants. The new survey has already been conducted in Italy, Brazil, Romania, Colombia, Indonesia, China, Saudi Arabia and the UK.

**Compensation**

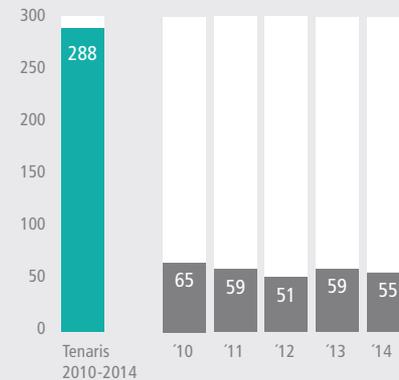
Tenaris's compensation policies are designed to attract and retain talented individuals, ensure internal equity, external competitiveness and reward merit. We continually monitor prevailing compensation practices for salaried employees in the countries in which we operate and adapt practices to ensure we remain competitive with other leading companies.

All salaried positions are graded through an internationally recognized position evaluation system that takes into account job responsibilities, the number of people supervised, the position's impact on the company's business and other factors. The combination of this position evaluation system and the adaptation of our pay scales and other compensation practices to keep us competitive in each country ensure that employees performing the same work across multiple countries are paid fairly relative to their peers within Tenaris. We believe these policies have contributed to maintaining our low resignation rate.

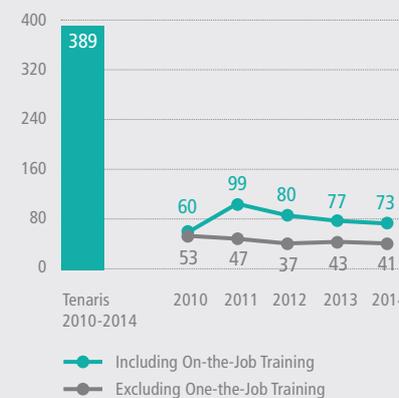
Compensation practices for hourly employees are highly dependent on conditions established in collective bargaining agreements or local laws and regulations, but two years ago the company began a process of reviewing these practices with the aim of sharing the best practices and establishing guidelines for performance bonuses and benefits.

# Human Resources Indicators

**Total training hours per salaried employee**



**Total training hours per hourly employee**



**Resignation Rate**



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

## TenarisUniversity

TenarisUniversity's mission is to build and sustain Tenaris' competitive advantage by capturing, organizing, enriching and transferring knowledge assets uniformly across the company.

TenarisUniversity offers more than 1,500 courses through a combination of e-learning, recorded training and classroom formats. Total training hours for salaried and hourly employees exceed 1.2 million annually.

TenarisUniversity has an annual operating budget of more than USD 15M and a staff of more than 100 employees. The learning unit receives strong support from top management, including the CEO who conducts approximately 12 sessions a year during TenarisUniversity's flagship training programs for managers and new employees from around the world.

TenarisUniversity's academic program spans the entire range of company needs from products and processes to business practices and management skills.

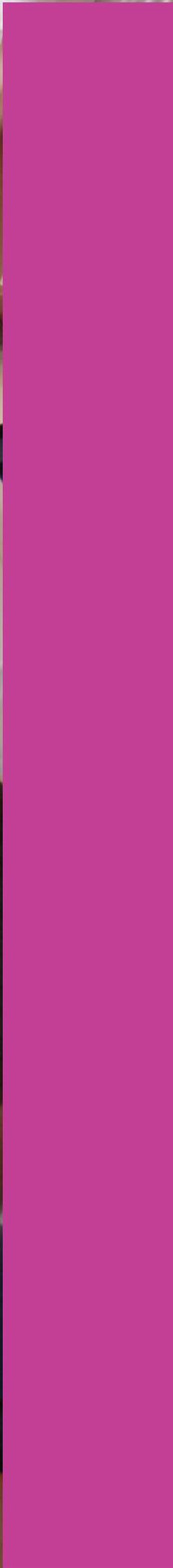
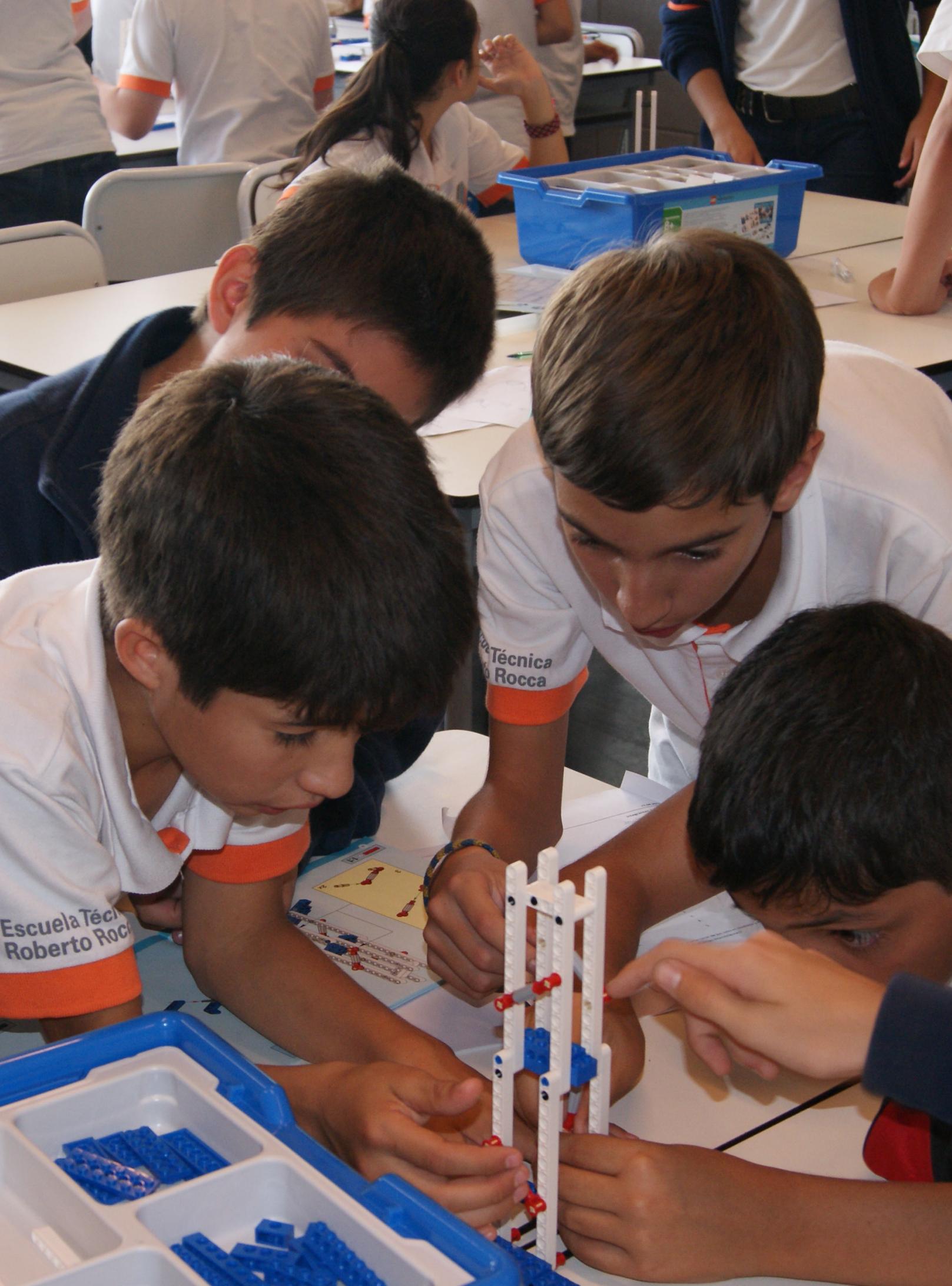
Between 2010 and 2014, Tenaris salaried employees spent on average 58 hours annually in training. And operators have received an average of 44 hours of classroom, although this almost doubled when On-the-Job training is included.

Tenaris fully embraces technical innovations and blends classroom training with e-learning, webinars, videos, MOOCs (Massive Open Online Course) SPOCs (Small Private Open Course) and simulations.

In November 2013, TenarisUniversity reached a collaboration agreement with edX, an educational institution created by founding partners Harvard and MIT, to expand the training and education offer for Tenaris's employees around the world and also for the entire community, as some of these courses will be open and free for anybody to take. The three-year agreement calls for the generation of a number of open and special purpose courses in edX's interactive platform, aimed at transforming online and on-campus learning through groundbreaking methodologies, game-like experiences and cutting-edge research on an open source platform. The agreement marks the first time a corporation works with edX to train its employees.

The first landmark of this agreement was reached on November 4, 2014, when TenarisUniversity launched its first MOOC on edX's platform. The course on Computer Numerical Control was designed by TenarisUniversity with the Roberto Rocca Technical School in Campana and attended by 4,200 students from 100 countries.

Instructor led training takes place at corporate campuses and classrooms in Argentina, Brazil, Canada, China, Colombia, Indonesia, Italy, Japan, Mexico, Nigeria, Romania, Uruguay, Saudi Arabia, the United States and the UK. Training also occurs at the TU main campus and residence in Argentina for global events that bring together employees from multiple countries.



# Community Development

Our community work reflects the values and heritage we share with the Techint Group.

# Community Development

Our community work reflects the values and heritage we share with our parent organization, the Techint Group, whose industrial background goes back almost seven decades.

In these activities, we seek to promote a virtuous circle between our industrial activities, the wellbeing of the communities where we operate and the individual development of citizens in those communities. By being an active participant and projecting our industrial values we can act as a force for community development and sustainability.

In all our contributions, we place a focus on helping those who help themselves. We work with people who are open to improvement and growth and seek to encourage effort and reward merit. Under these principles, the company supports sustainable initiatives capable of strengthening surrounding communities in a complex and competitive environment.

Education is the primary focus of our community activities. We see education as a universal value for social integration and development, and we place special emphasis on technical education, in order to help young people to develop the social, emotional and technical skills that would allow them to pursue careers in the industrial world. We also support cultural activities and other programs with the goal of fostering social inclusion and development. One such program is the support, through the donation of pipes and logistics services, we have provided over the years to Toni Ruttiman, an extraordinary individual who has dedicated his life to building bridges to connect communities in remote areas of the world, whose work embodies the values that we espouse within Tenaris.

Over the last four years, Tenaris invested USD 75 million in community projects. This includes our investment in the Roberto Rocca Technical School in Campana, Argentina, the first of a network of technical schools that we plan to develop in many of the communities where we operate. This new school is also responsible for producing content and teaching techniques to strengthen public and private technical education in a wider community.

## Education, at all levels

Over the last few years, Tenaris has increased its support for education at all levels. We have introduced a number of new initiatives focused in particular on promoting the development of technical education and we now aim to establish a network of technical schools featuring modern teaching and learning methodologies in many of the communities where we operate.

In our education programs, we seek to foster inclusion and social-emotional development at the primary level, merit and technical skills in secondary schooling and enable opportunities for able students to continue their studies at higher levels. Our challenge has been to articulate programs capable of keeping these universal values while adapting to the varied realities of the communities where we operate worldwide.

Our overall investment in education programs has almost doubled over the last four years (from USD 3.7 to USD 7.1 million – See Chart). We have granted these programs an institutional framework to guarantee transparency in the allocation of funds.

# Community Indicators

## Investment in the Community

(in million USD)



Note: 2012 and 2013 include the one-time investment of USD 13.9 and 12.1 million respectively on the construction of the Roberto Rocca Technical School in Campana, Argentina.

## Investment in Education

(in million USD)



### AfterSchool, fostering inclusion activities in primary school

Our AfterSchool program offers extra learning and enriching hours for primary students of single shift schools (4 hours a day) in the communities where we have our operations. The program provides three extra hours of non-formal education, four days a week. This mainly involves Inquiry Based Science education, STEM (Science, Technology and Maths), and it also includes art and recreation workshops and homework support.

The program aims at increasing school attendance, improving academic performance and developing the socio-emotional skills of the children who attend.

Promoting school inclusion is key to many of the communities where our industrial activity is carried out, especially in many Latin American countries where attendance at primary school has room for improvement.

The AfterSchool program is a relatively recent initiative first introduced in the towns of Campana in Argentina, Veracruz in Mexico and Pindamonhangaba in Brazil. In 2014, the program was extended to Zalau in Romania, while similar programs are run in Uruguay, Colombia and the USA.

Surveys conducted in Campana, Argentina, and Pindamonhangaba, Brazil, showed that over 95% of the children in the program responded that they would like to continue with the program. And average 96% of the parents and 100% of the school principals considered the program from “excellent to good”.

Over the last four years, Tenaris’s investment in afterschool initiatives has gone from just over USD 200,000 to USD 1.2 million in 2014. Over this period, 1,600 children in six countries attended out-of-school-time programs supported by the company.

### Merit Award, rewarding high-school performance

This is the organization's oldest education-support program. It was established in 1959, initially designed to help the children of our employees but is open since 2007 to many other students in our communities. The program presents students in secondary education in the communities in which we operate with recognition and financial support for their academic excellence.

The recognition includes a financial grant, based on academic merit and engagement in the education process (grades, attendance, discipline). In 2014, 1,558 students received awards in Argentina, Brazil, Canada, Colombia, Mexico, Indonesia, Italy, Romania and Nigeria.

### Technical Gene

This program seeks to make a contribution to close the gap between the technical education students receive at school and the needs of the industry. Technical Gene provides support for infrastructure and equipment, teachers' training, school management train-

ing, and on-the-job training internships for high school students.

It is currently underway in Argentina, Romania, Brazil, Mexico, Italy and the USA and covering 2,761 students. We also plan to implement the program in Canada and Colombia.

### Roberto Rocca Education Program

Started in 2005, this program offers scholarships for graduates and postgraduates to study applied sciences or engineering. The scholarships are awarded according to the applicant's academic and professional achievements, leadership potential, and commitment with the development of their countries.

The program is named after one of the founders of the Techint Group, Tenaris's parent company. Born in 1922 in Milan, Italy, Roberto Rocca joined his father, Agostino Rocca, in founding Techint in 1948, and in 1978 succeeded him as chairman of the Group, driving its growth in industrial activity during the 1980s and until his death in 2003.

	Awarded since the start of the program	Active scholarships during the period				
		2010	2011	2012	2013	2014
<b>Fellowships</b>						
Global	<b>93</b>	28	35	28	27	26
<b>Scholarships</b>						
Argentina	<b>719</b>	272	264	261	210	214
Brazil	<b>192</b>	50	40	40	39	39
Canada	<b>72</b>	9	15	15	18	15
Colombia	<b>91</b>	25	25	22	27	31
China	<b>112</b>	13	20	18	18	15
Ghana	<b>11</b>			3	4	4
Guatemala	<b>14</b>		5	5	5	5
Indonesia	<b>12</b>				6	6
Italy	<b>247</b>	42	45	45	45	45
Japan	<b>76</b>	10	11	7	8	9
Mexico	<b>796</b>	161	161	168	166	166
Romania	<b>249</b>	40	42	40	40	40
UK	<b>10</b>			2	2	6
Uruguay	<b>10</b>	7	6	0	3	3
USA	<b>84</b>		14	19	25	26
Venezuela	<b>143</b>	34	15	10	5	5
<b>Total</b>	<b>2838</b>	<b>663</b>	<b>663</b>	<b>655</b>	<b>621</b>	<b>629</b>

## A network of Technical Schools



**In 2013 Tenaris inaugurated the first of what is expected to be a network of technical schools.**

Together with our affiliate Ternium, we are developing an international network of technical schools designed to provide quality education to uphold our industrial values of progress, quality, merit and effort.

The main objective of these schools is to expand and modernize technical education in the communities where we operate and more generally in order to promote the education of young people in technical knowledge. Its goal is to help the students to acquire the tools needed to succeed in an increasingly competitive international labor and academic environment.



The first Roberto Rocca Technical School was built in Campana, Argentina and opened in March 2013 with 60 students in the electronic and electromechanical specialization. Another 60 students joined for the second year. We will be developing similar schools over the next few years in another countries. Ternium will build the next one in Pesquería, Mexico, near Monterrey and the company's industrial facility there. It is scheduled to open in the second half of 2016 and it will teach 360 students.

The first two years of the school in Campana delivered good academic and attendance results. Students attended on average 96% of the classes and close to 50% of the students passed all their subjects without having to retake any of them. Sixty new students are admitted every year.

The program has grown over the years. In 2013 and 2014, it funded an average 26 active Fellowships for students attending universities in the USA and Europe; and 625 Scholarships for undergraduate students at 98 universities in 18 countries (in Argentina, Mexico, Brazil, Romania, Colombia, Venezuela, Indonesia, Italy, Canada, China, Romania, UK, Guatemala, Uruguay, Ghana, USA, Japan and Venezuela). Investment on the program has totaled USD 2.7M.

#### **Film and art as a reflection of identity**

Art and culture also play an important role in our community development activities. Our culture activities are aimed at highlighting excellence and innovation and the values of diversity and integration, in the understanding that exposure to different cultures and ideas forms an important element in our company's development and constitutes an enriching advantage.

In 2014, Tenaris organized Latin American film festivals in nine locations where it has operations. The film festivals (called Cinelatino, Festival de Cine Latinoamericano and Latin Wave, according to the venue) feature the works of independent filmmakers and focus on the exchange of experiences and diversity among communities, allowing people to immerse themselves in a variety of realities. For a global company with strong

Latin roots like Tenaris, it is key to bring our communities together through arts and films, to share and exchange worldviews and visions. The festivals and viewings include seminars conducted by directors and producers. The list of venues included Campana (Argentina), Houston (USA), Bergamo (Italy), Puebla (Mexico), Calarasi, Campina and Zalau (Romania), Calgary and Sault Saint Marie (Canada).

Tenaris also promotes modern and contemporary art through Fundación PROA in the neighbourhood of La Boca, Buenos Aires, Argentina and through Galleria d'Arte Moderna e Contemporanea (GAMEC) in Bergamo, Italy.

Fundación PROA was founded in 1996 and is funded by Tenaris and other companies of the Techint Group. It has become an important player in the local and international arts scene, organizing renowned temporary exhibits featuring the main artistic currents of the 20th and 21st Century. An exhibit by Ron Mueck between November 2013 and February 2014 reached a record number of visitors (168,102) for PROA and was one of the most visited exhibits of its type in Buenos Aires.

PROA is constantly looking for ways of innovating in the way it presents contemporary art to large audiences. In late 2014 and early 2015, PROA organized an exhibit by the Chinese contemporary artist Cai Guo-Qiang. “Impromptu” was capped by an “explosion event” entitled Life is a milonga in January 2015. It was a show on the cost of the Riachuelo River outside PROA that integrated fireworks, music, dance, and audience participation to trace the history of the city’s music over the course of the 20th century. Over 200,000 people attended the event.

GAMEC opened in 1991 in Bergamo where Tenaris has its Dalmine mill. It is located in what was formerly a convent built in the 15th century and presents a wide variety of local and international exhibitions.

We also contribute to the protection of pre-Hispanic archeology in Mexico, where we have agreements with Xalapa’s Museum of Archeology (MAX) and the National Institute for Anthropology and History (INAH) in Mexico City for digitalization and preservation of their collections. With the MAX, we have digitalized and registered 15,000 pieces. With the INAH we have digitalized all the 326 pieces in the Gulf of Mexico section of their exhibition. As part of these agreements, we organize exhibitions and guided visits.



A student in the Roberto Rocca Technical School in Campana, Argentina.

A Cine de Barrio film event in Cartagena, Colombia.

Thousands attend a show of fireworks and music in PROA, Buenos Aires.



In Campana Argentina, more than 300 employees gathered for two days of volunteering in June 2014 to revamp of the the town's largest schools.

### **The photographic memory (past and present) of our industry**

The Fondazione Dalmine (Dalmine Foundation) opened in 1999 is in charge of rescuing, preserving, digitalizing and revisiting the historic photographic archive of our industrial facilities, some of which date back to over 100 years. Fondazione Dalmine has more than 30,000 images depicting industrial life since over a century ago. We are also committed to registering the industrial present of our facilities and have assigned renowned photographers to shoot our facilities worldwide, bringing to life our operations and facilities to the community.

We have also developed photo libraries in Argentina, Mexico and Brazil and are looking into expanding the project to other countries, including the USA and Uruguay. The libraries are the result of joint work with the communities in the task of collecting, digitalizing and archiving historic photographs that portray the past and present of the cities.

In an increasingly digital context, we are also encouraging our employees to contribute to our photographic libraries by setting up photo exhibit spaces in our mills and offices around the world.

The most recent photo library was opened on December 1 at the “Palacete 10 de Julho” (July 10 Palace) in Pindamonhangaba, the Brazilian town where Tenaris has its facility. Tenaris contributed to the restoration and reopening of the landmark building and helped to set up the library, which will now collect and protect the history of the city.

### **Volunteering, the Tenaris community in action**

Tenaris has more recently begun to encourage employees to engage in volunteering activities in the communities where we operate. From refurbishing schools and giving after-school support classes to donations and public health initiatives, employees in Canada, the United States, Brazil, Colombia, China, Romania, Japan and Argentina invested time off work to participate.

During this period we have drafted guidelines for volunteering, defining the company’s strategy in encouraging employees to get involved in work that makes a contribution and strengthens our mutual bonds with the communities where we operate. Again, we are concentrating our efforts in the development of activities associated with education.

Two model initiatives were held in Campana, Argentina, in December 2013 and May 2014. They consisted of a weekend refurbishing a primary school and more than 500 people participated (including employees, their families and members of the community). A similar action will be organized in Pindamonhangaba, Brazil, in 2015.

In the US and Canada our employees participate in a number of initiatives, from lending a hand to the Houston Food Bank and supporting the city’s largest annual marathon to clean up a local beach and plant trees. Overall in the US, 251 volunteers dedicated 1,114 hours of work in 2013 and 271 volunteers invested 1,167 hours in 2014.



# Governance and Economic Indicators

Tenaris has a Code of Conduct incorporating guidelines and standards of integrity and transparency applicable to all its employees and directors.

# Governance and Economic Indicators

Tenaris is a company established in 2001 in Luxembourg to consolidate the pipe and tubes business of the Techint Group. In addition to its controlling 60% of the shares in Tenaris, the Techint Group has controlling interests in Ternium, a leading Latin American producer of flat and long steel products; Tecpetrol, an oil and gas company; Techint, an engineering and construction company; Tenova, a supplier of equipment and technologies for iron and steel and mining; and Humanitas, a network of hospitals in Italy.

The Company's shares trade on the Italian Stock Exchange, the Buenos Aires Stock Exchange and the Mexican Stock Exchange; in addition, the Company's ADSs trade on the New York Stock Exchange.

Responsibility for the management of the company resides in its board of directors, currently comprising ten directors, of whom three are independent of the Techint Group and company management. Our Chairman and CEO is Paolo Rocca, the grandson of the founder of the Techint Group.

The Company's board of directors has an audit committee consisting of its three independent members. The charter of the audit committee sets forth, among other things, the audit committee's purpose and responsibilities, which includes the responsibility to review material transactions with related parties in order to determine whether their terms are consistent with market conditions or are otherwise fair to the Company and/or its subsidiaries. The audit committee reports to the board of directors on its activities, and on the adequacy of the systems of internal control over financial reporting.

For further details of our board of directors, senior management and corporate governance please refer to our website ([www.tenaris.com](http://www.tenaris.com)).

## Financial strength

A consistent and prudent long-term approach to financial management and a focus on competitive differentiation have enabled Tenaris to consolidate a strong financial position over the years. Operating in a cyclical industry, this approach allows Tenaris to continue investing for growth even during industry downturns. Our financial indicators demonstrate that the sustainability of our operations rests on solid foundations.

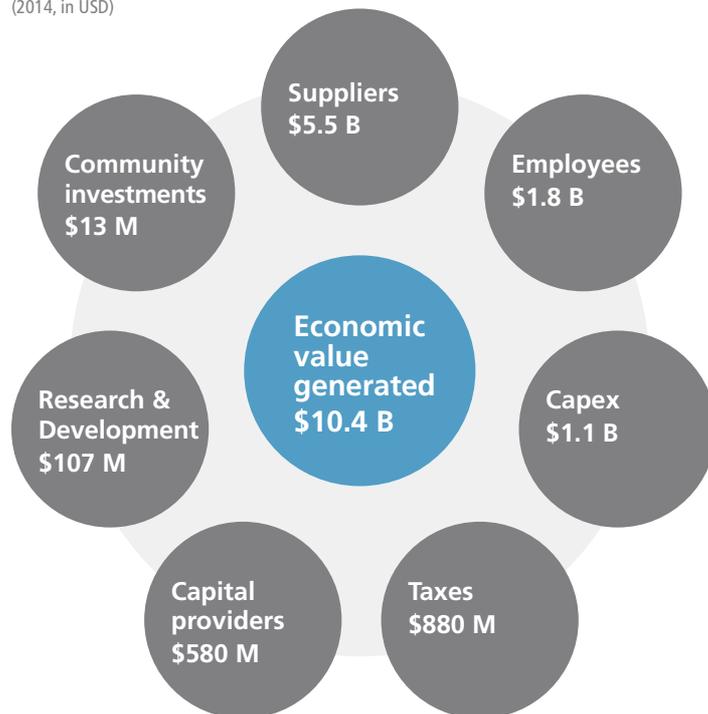
## Integrity and transparency

Tenaris has a Code of Conduct incorporating guidelines and standards of integrity and transparency applicable to all its employees and directors. This Code of Conduct establishes the ethical principles that form the basis for relations between the company, its employees and third parties and provides the means and instruments to give transparency to issues and problems that may have a bearing on the management of the company.

We have established a Compliance Line to allow employees, customers, suppliers and other interested parties to report any conducts contrary to the Code of Conduct or its principles on a confidential basis. The Compliance Line operates according to procedures designed by our Internal Audit function under the direct supervision of our Audit Committee.

### Economic value generated and distributed

(2014, in USD)



### Financial Indicators

	2010	2011	2012	2013	2014
<i>Million of USD (except otherwise stated)</i>					
Net Sales	7,712	9,972	10,834	10,597	10,338
Operating income	1,519	1,845	2,357	2,185	1,899
EBITDA	1,959	2,399	2,875	2,795	2,720
Shareholders net income	1,127	1,332	1,699	1,551	1,159
Shareholders equity	9,872	10,457	11,328	12,290	12,654
Cash flow from operations	871	1,283	1,856	2,377	2,044
Dividends	401	449	508	508	531
Net cash / (debt)	276	324	(271)	911	1,257
EBITDA margin %	25%	24%	27%	26%	26%
ROE %	12%	13%	16%	13%	9%
ROCE %	17%	19%	22%	19%	17%
FCF / Net income %	2%	30%	63%	103%	81%



We have also implemented a normative framework that contemplates the adoption of preventive measures to fight corruption and bribery and reflects the requirements of applicable laws and regulations. The Compliance Program comprises of a stringent and consistent risk assessment, which enables the company to focus attention on critical factors and identify, evaluate and prevent potential infringements or breaches to applicable regulations.

When hiring representatives and contractors, a comprehensive evaluation of each candidate has been incorporated as an integral part of the retention procedure giving primary importance to the candidate's ethical, transparent and lawful behavior.

Tenaris ensures that relevant policies and procedures are communicated throughout the organization by applying internal communication channels and by the implementation of additional educational tools.

Tenaris regularly trains employees on anti-bribery provisions through on-line courses and in-person training sessions that focus on the most critical topics raised during day-to-day operations.

### **Suppliers**

Tenaris purchases the majority of its raw materials and supplies through Exiros, a specialized procurement company whose ownership is shared with Ternium. Exiros has a total of 33,000 registered suppliers, of which 12,000 were active in 2014.

All suppliers undergo a rigorous process of selection to ensure adequate standards of quality, health, safety and environment, as well as ethical conduct are in place in conformance with applicable laws and regulations and in accordance with our QHSE policy and code of conduct.

# Capital Expenditures

In the last five years, Tenaris has invested substantial capital in transforming the capacity and competitiveness of its global industrial system to meet higher demand for products used in complex and unconventional applications and meet local content initiatives in various locations. Despite the current market downturn, we will continue with a high level of capital expenditure through 2015 and 2016 as we complete a number of investments in course including our new seamless pipe facility in Bay City, Texas.

**Capital expenditures**

(in million USD)



Having established the standards required of suppliers, Exiros works with them to ensure adherence with our QHSE policy and Code of Conduct through ongoing assessments, action plans and contractual clauses with regular audits. A total of 436 supplier audits were conducted in 2014. By working collaboratively with suppliers, Exiros seeks to ensure that management systems are in place that address issues, risks and opportunities and that these systems deliver effective performance management and improvement.

Exiros also encourages our suppliers to pursue and adopt management systems that can demonstrate, through certification, the use of responsible management processes.

In addition to this policy of active engagement with suppliers to ensure stringent levels of quality, HSE management and compliance with ethical standards, the Techint group, including Tenaris, has a program (ProPymes) to support the development of small and medium companies that are our suppliers or customers in the communities where we have our operations in Latin America. Under this program, technical knowhow and financing is made available to support these companies to develop international standards of competitiveness and facilitate entry into export markets.

# Corporate Information

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