

# Sustainability Report 2015





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# Introduction

## Our values represented in action

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 and a direct presence in most major oil and gas markets.

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

Safety, quality and transparency are at the core of Tenaris's values and the cornerstones for the sustainability of our activities. This report shows the way we see these values reflected in our everyday activity. You will find a series of indicators in the areas of Finances and Governance, Health and Safety, Environment, Innovation, Human Resources and Community Work that show our long-term, integrated approach to management in these areas.

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 our employees, investors, customers, contractors, suppliers, as well as the communities where we operate and the industry where we belong.

Within the World Steel Association (worldsteel), Tenaris is signatory of the Sustainability Policy and the Sustainability Charter. We participate and support activities related to technology & innovation impacting the environment and the health & safety of our company and the entire industry.

Our HSE Management System is designed according to ISO 14001 and OHSAS 18001 standards. Tenaris decided in 2012 to have our main production facilities certified according to these standards by the end of 2015. We have now mostly accomplished that objective: more than 86% of our employees work in sites under certified management systems. We aim to complete the certification process by the end of 2016.

Tenaris is committed to building a culture of transparency and integrity, based on ethical behavior and compliance with the law. We believe this is essential for the sustainability of our activities in a market environment that is increasingly challenging and competitive.

## Key indicators 2011-2015

Our Injury Frequency Rate improved by

**46%**

between 2011 and 2015

**86%**

of our employees work in sites with ISO 14001 and OHSAS 18001 certified management systems

Total economic value generated (2015)

**USD 7.2  
billion**

Total investment in community projects  
(2011-2015)

**USD 86.7  
million**

From 1,179 to 1,358. We increased by

**15%**

the number of scholarships awarded to high-school students in 2015

**85%**

was the record percentage of employee participation in our biennial opinion survey

**80**

The annual average training hours for our hourly employees.

# Tenaris

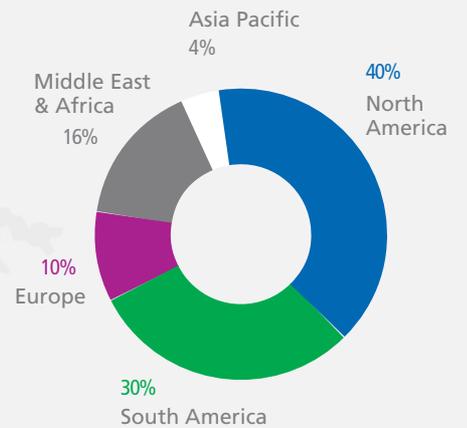


**Integrated Quality (ISO 9001:2008) and Health, Safety and Environment (ISO 14001 - OHSAS 18001) management systems.**



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

## Sales by Region



## 30 Countries

Services and distribution network

## 4 Countries

Stock exchange listings

- New York
- Buenos Aires
- Italy
- Mexico

## Top customers

- Aramco
- Chevron
- ConocoPhillips
- Continental
- ENI
- ExxonMobil
- Kuwait Oil Company
- Noble
- Oxy
- Pemex
- Petrobras
- Pioneer
- Shell
- Total
- YPF

# Chairman's Letter

The collapse in the price of oil and the decline in oil and gas drilling activity worldwide are resulting in profound changes in the markets where we operate. This is the most severe downturn I have experienced and the survival of many companies in our industry is under threat. As we go through a second consecutive year of deep reductions in spending by our customers, global demand for the products we make is less than half what it was in 2014.

At the same time, the severe downturn represents an opportunity for oil and gas operators and suppliers to map out a more efficient way of working that can deliver sustainable cost reductions over time. As we advance with the construction of our Bay City mill, we have introduced our Rig Direct™ service model to many customers in the USA and Canada. This is a model that we use extensively in markets where we have local production facilities. It integrates the supply of pipes and accessories from the mill to the rig operating under a single QHSE management system in accordance with the highest professional standards, focusing on process and operational efficiency with the objective of lowering overall costs. Rig Direct™ offers significant environmental benefits in addition to cost savings. The synchronization and shortening of the supply chain results in lower scrapping and reworking of materials as well as reduced logistics emissions.

As we implement the measures necessary to ensure our long-term competitiveness and profitability, we are taking care to maintain the long-term values, which have been the hallmark of our company since it was founded over 60 years ago. Safety, for example, is a key value for an industrial company like ours, essential for our competitive differentiation and the long-term sustainability of our operations. Our main safety indicators improved in 2015 as we implemented a zero tolerance program alongside our Safe Hour and Safe Start programs. Our average injury frequency rate declined 15% compared to 2014 and has declined 46% over the past four years.

Our objective to complete certification of our HSE management system under the ISO 14001 and OHSAS 18001 standards is now almost complete, with all our main production sites certified. In addition to our new mill in Bay City, which is being designed to set new standards for environmental performance and efficiency in a seamless pipe mill, we continue to invest, throughout our industrial system, to improve energy efficiency, reduce water consumption, minimize particulate and air emissions from our steel shops, and reduce the waste from our operations.

We have also maintained the level of investment we make in our community development programs. Our focus here is on improving the level of technical education in the communities where we operate and encouraging bright students from all backgrounds to pursue education opportunities which might not otherwise be open to them. The Roberto Rocca Technical School in Campana, Argentina has now been in operation for over three years with excellent results. This year we introduced a performance evaluation system designed with the input of the Measures of Effective Teaching established by the Gates Foundation. Our sister company, Ternium, will open a second Roberto Rocca Technical School in Monterrey, Mexico, which will share the curriculum and teaching methods developed in Campana.

Inevitably, during this prolonged industry downturn, which has severely affected our revenues and profitability, we have had to adjust our structural costs and workforce to ensure the sustainability of the company for the long term. We have sought to be as transparent as possible with our employees about the company's situation and they have responded positively as evidenced in the results of the opinion survey we held during the year. At the same time, we are continuing to invest in training and development, maintaining the main programs conducted by TenarisUniversity and the number of hours dedicated to training for each employee.

I would like to mention the recognition that TenarisUniversity has achieved over the past year. The MOOCs (Massive Online Open Courses) on OCTG products and services that it produced in 2015 for the edX platform founded by Harvard and MIT achieved outstanding performance ratings and completion rates around the world. And Tenaris was included within the top ten companies for its employee training and development practices in 2016 by Training Magazine, an established US publication.

Our company is navigating a difficult moment in our industry. However, our financial strength is allowing us to maintain our investments in our people, our industrial system, in developing our service to our customers, developing new products and the communities that help to sustain us, in accordance with the long-term values that we have espoused since our origins. These values will help us to emerge from this downturn with the sustainability of our operations strengthened.

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**

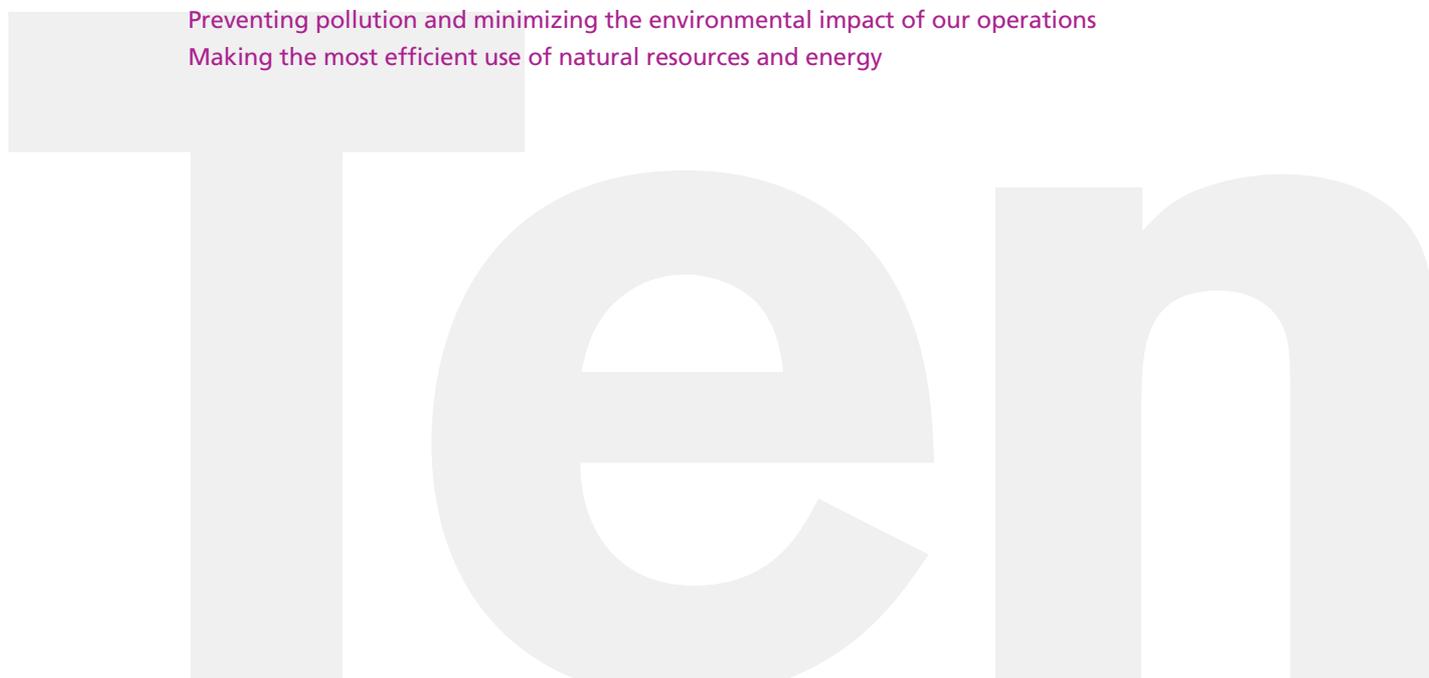
All injuries and work-related illnesses can and must be prevented  
Working safely is a condition of employment

**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







# Governance and Economic Indicators

# Governance and Economic Indicators



Our capital expenditure

## USD 4.6 Billion

between 2011 and 2015

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)).

### 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.

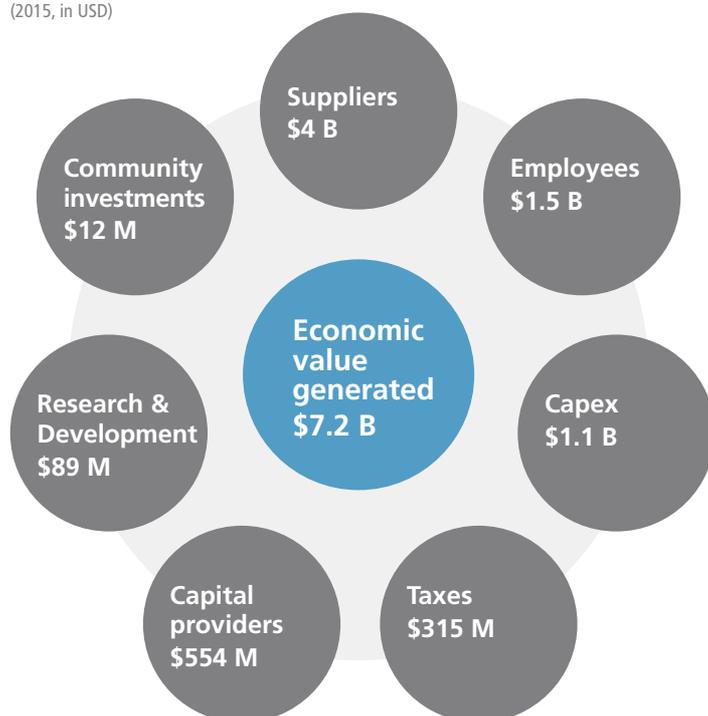
We have established a Compliance Line to allow employees, customers, suppliers and other interested parties to report any conduct contrary to the Code of Conduct or its principles on a confidential basis. The Compliance Line operates according to procedures designed by our Internal Audit function under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

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 consists 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 of 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 through internal communication channels and by the implementation of additional educational tools.

### Economic value generated and distributed

(2015, in USD)



### Financial Indicators

	2011	2012	2013	2014	2015
<i>Millions USD</i> <i>(except otherwise stated)</i>					
Net Sales	9,972	10,834	10,597	10,338	7,101
Operating income	1,845	2,357	2,185	1,899	195
EBITDA	2,399	2,875	2,795	2,720	1,255
Shareholders net income	1,332	1,699	1,551	1,159	(80)
Shareholders equity	10,457	11,328	12,290	12,654	11,713
Cash flow from operations	1,283	1,856	2,377	2,044	2,215
Dividends	449	508	508	531	531
Net cash / (debt)	324	(271)	911	1,257	1,849
EBITDA margin %	24%	27%	26%	26%	18%
ROE %	13%	16%	13%	9%	-1%
ROCE %	19%	22%	19%	17%	2%
FCF / Net income %	30%	63%	103%	81%	N/A%

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

Building lasting relationships with our suppliers and contractors is part of our values but also relevant to our performance. Tenaris purchases most of its supplies through Exiros, a specialized procurement company whose ownership we share with our sister company Ternium. Exiros has a total of 36,542 registered suppliers, of which 7,982 were active in 2015. Exiros has a quality system certified under ISO-9001 standards. All suppliers undergo a rigorous process of selection to ensure adequate standards are in place in line with applicable laws and regulations and in accordance with our QHSE policy and Code of Conduct. We have developed a Code of Conduct for Suppliers to be applied in any case covering all aspects related to ethical behavior, compliance with law, health, safety and environment.

Regarding HSE we have a process implemented to qualify and verify our service suppliers, which are categorized according to the HSE risk level of their activities. Since we started with this project in 2012, around 47 percent of the 1,270 active service suppliers in a higher HSE risk category have already been audited before contract award or during their activities, and another 350 were audited on HSE even if not classified as high risk.

Audits are performed against a standard self-assessment that is required for any service supplier willing to work for Tenaris. During 2015, 372 new audits were performed, and improvement plans conducted when gaps are detected.

We are committed to the involvement and integration of our contractors in our HSE management system through different ways, including induction courses, regular meetings and training for awareness, as well as their participation in our Safe Hour program and other engagement activities.

### Capital Expenditures

During 2015, our capital expenditures, including investments at our plants and investments in information systems, amounted to \$1.132 billion, compared to \$1.089 billion in 2014 and \$753 million in 2013. Of these capital expenditures, investment at our plants amounted to \$1.066 billion in 2015, compared to \$1.008 billion in 2014 and \$667 million in 2013.

In the last five years, Tenaris has invested substantial capital in transforming the capacity and competitiveness of its global industrial system. Despite the current market downturn, we reached another record level of investment in 2015, as the building of our new plant in Bay City, United States, progressed. The new mill is scheduled to start up in 2017.

In addition to capital expenditures at our plants, we have invested in information systems for the integration of our production, commercial and managerial activities. These investments are intended to promote the further integration of our operating facilities and enhance our ability to provide value-added services to customers worldwide. Investments in information systems totaled \$65 million in 2015, compared to \$80 million in 2014 and \$86 million in 2013.

## Capital Expenditures

### Capital expenditures

(in million USD)



A close-up photograph of a male worker in a white hard hat and safety glasses, wearing a dark green jacket, focused on his work. He is positioned in front of a large, dark-colored industrial machine with several rollers. The background is slightly blurred, showing other workers in similar attire. The overall scene is set in an industrial environment with warm lighting.

# Safety and Health

# Safety and Health



**Our Injury Frequency Rate**  
has improved by

**46%**

between 2011 and 2015

## Our number one priority

Nothing is more important for Tenaris than the health and safety of the people who work in our facilities and use our products and services. The entire organization is oriented towards achieving the goal of zero accidents in a transparent manner.

As stated in our QHSE Policy, we believe that all accidents and work-related injuries can and must be prevented. The way to achieve this is by building a strong safety-oriented culture.

We continue to implement initiatives to strengthen awareness, achieve full compliance with our procedures, and to standardize practices and technologies in order to minimize exposure to safety risks. This year we launched two new initiatives: a zero tolerance program and an integral revision of our HSE training program.

Our Injury Frequency Rate continued improving in 2015 compared to previous years, achieving a reduction of 20% vs 2014. The Lost Time Injury Frequency Rate also resumed a downward trend it had lost in 2014, as we continue to work to meet the below-1 target set by the World Steel Association (worldsteel). Regrettably, we suffered one fatality in 2015, when one of our employees was trapped between the mast of a heavy forklift and a spool in our BlueCoil® coiled tubes facility in the United States.

We participate, along with leading steel-producing companies, in the World Steel Association's safety groups in order to define common guidelines on different topics concerning safety management. Some of the aspects under discussion include process safety management to reduce high-risk

incidents and fatalities and Leadership in Safety to achieve a solid and uninterrupted chain of awareness from the CEO to the supervisors and the workers.

The Process Safety Management project, along with another project on catastrophe risk analysis, seeks to detect and to prevent unexpected events that could have a serious effect on our people, our mills or the environment. Process Safety Management focuses on the design and engineering of facilities, equipment maintenance, effective alarms and control points, procedures and training.

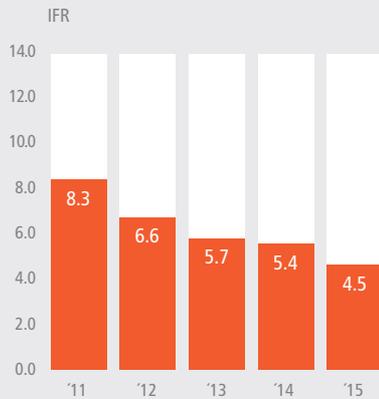
Special task forces per process area continued to work this year to improve our management on different topics, such as safety control on furnaces, lockout/ tag-out, the control of overhead cranes and vehicle management.

We are placing a great deal of our effort on behavior management. After analyzing high severity events in our sites over the last years, we concluded that the 90% of the events were related to behavior. We noticed that the effort we have made in improving physical conditions of work need to be complemented with a strong focus on behavior.

That is why we are launching a "Zero Tolerance" program, which aims at identifying and discouraging dangerous behaviors by establishing sanctions for deviations that could potentially lead to a fatal outcome. We are currently working on defining the scope of the program and the type of disciplinary sanction to be introduced.

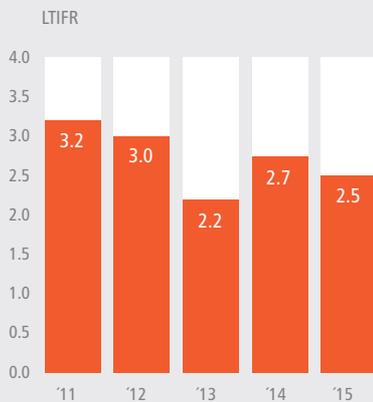
# Safety Indicators

## 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.

This focus on behavior builds on our Safe Hour program, introduced in 2012 throughout Tenaris. The Safe Hour establishes a routine one-hour walk twice a week through the mills by top and middle management of the operative areas. It seeks to engage workers in constructive dialogue on safety issues and discuss any safe or unsafe behavior and conditions. Four years after the program was launched, it continues to prove to be an effective tool to achieve greater awareness and a safety-first culture in Tenaris. In 2015, a total 48,390 Safe Hour routines were performed, 7% more than the previous year. And thanks to the on-site conversations during the routines, 14,369 observations were recorded, 28,515 positive feedbacks given to workers and 16,507 improvement commitments obtained.

We also got on with the implementation of Safestart, a safety training program that focuses on risk perception and is designed to reduce injuries both on-the-job and off-the-job by encouraging personal responsibility for safety.

During 2015, we started a project to review the HSE training of our main operative functions. Based on a definition of the minimum required skills, we are now reviewing and designing new training materials both for new employees and to help employees catch up when gaps are detected. We also implemented a pilot safety leadership training hosted by Saipem in Dalmine to teach peer-to-peer detection and control of unsafe behaviors.

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

## Health

Tenaris is 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 in order to assure through a pre-defined health protocol that all employees receive adequate and regular medical checks.

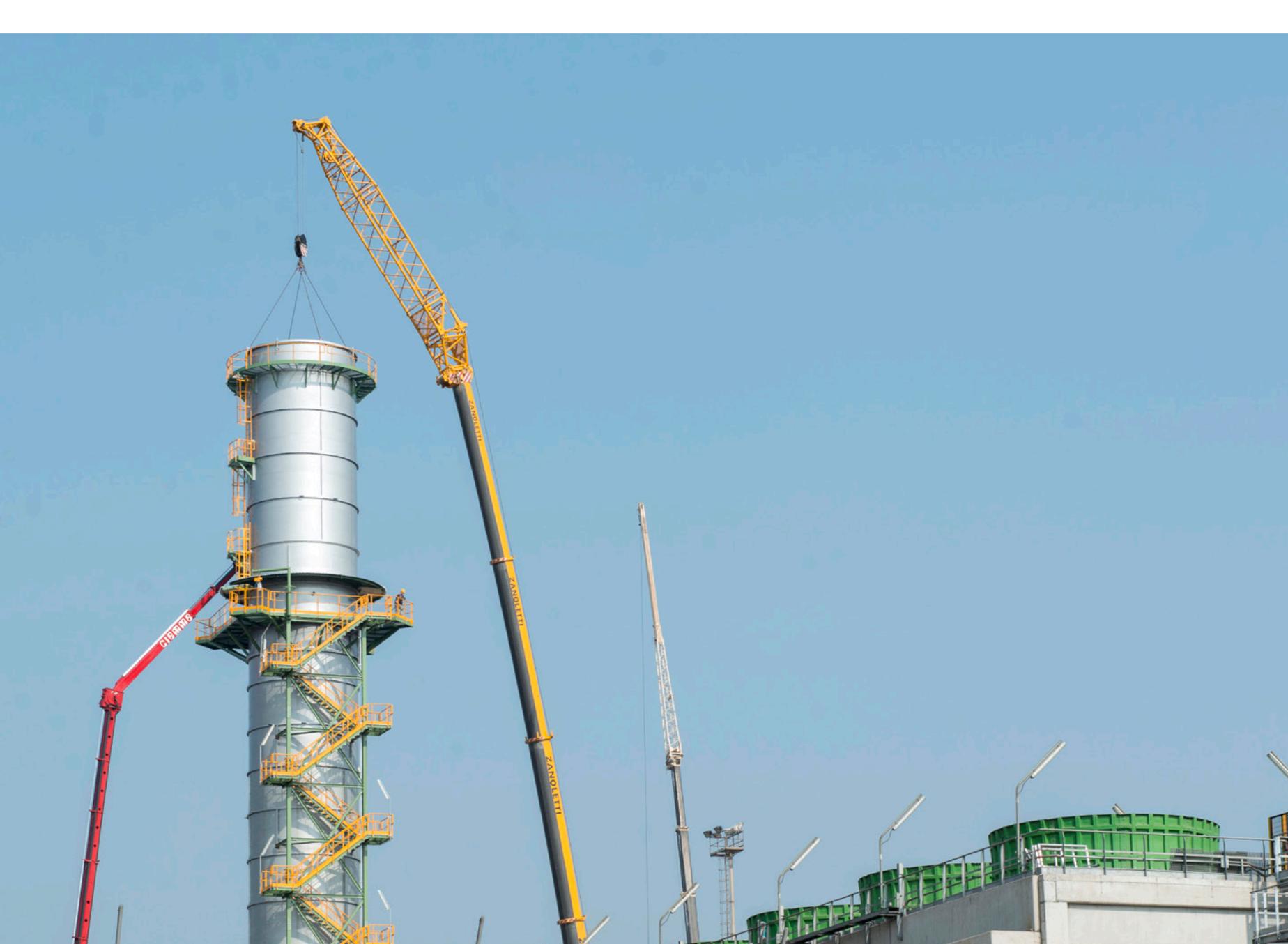
We have defined global procedures and guidelines related to in-door air quality, noise, vibrations, etc. Noise studies have been performed in all our sites to identify the action required to reduce noise at the source.

We use videos, brochures and other training and communicational material to increase awareness on healthy lifestyles, in order to help our employees prevent common illnesses such as cancer, heart diseases, obesity, etc.

With the support of an ergonomic team, we carried out the assessment of ergonomic risks for all job positions at Confab in Brazil. Based on the process implemented in Confab, we have launched an ergonomic risks assessment in the rest of our sites. We have also carried out R&D projects regarding health: in collaboration with

Milano University, we performed a study to optimize the design of a quality control workstation using a process simulation tool.

We have also improved our IT tool for HSE management, in order to integrate the risk analysis with the 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. With this information, the physician is able to correlate potential pathologies with the workplace conditions and recommend actions to minimize hazards.



The image shows a large-scale industrial construction project. A tall, cylindrical metal tower is the central focus, with several yellow cranes positioned around it. One crane is lifting a component from the top of the tower. The tower has multiple levels with yellow safety railings and ladders. In the background, there are other industrial structures, including a large green cylindrical tank. The sky is clear and blue. A green semi-transparent banner is overlaid at the bottom of the image, containing the word 'Environment' in white text.

# Environment

ZONA 7  
PARCO ROTTAME  
SCRAP YARD

ACCESSO CONSENTITO  
AGLI AUTORIZZATI

# Environment

Tenaris is determined to minimize the ecological footprint of its operations and products.

The downturn in oil prices since mid-2014 is having a profound impact on our market and our activity levels. Our activity slowdown also affects our environmental performance results, since all of our sites have operated at a lower pace and therefore affected our energy consumption efficiency.

Despite the adverse global market situation, we have sustained our investment to improve our environmental performance, with projects totaling USD 22 million between ongoing and completed during 2015, and more than USD 190 million invested in improving environmental performance since 2010.

We have also kept the level of activity in research and development projects related to 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.

The construction of our Bay City mill continues. We are following specifications under the Leadership in Energy & Environmental Design (LEED) of the US Green Building Council, seeking the same certification we obtained for our rolling mill in Tamsa, Mexico, in 2013.

A number of best available technologies are included in the Bay City designs: nitrogen oxide emissions will be minimized by using selective catalyst reduction systems, and also by applying the most advanced technology on burners in order to maximize energy efficiency; low volatile organic compounds water-based varnish for coating operations; and 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 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 (ergonomics, noise, emissions and heat stress).

## Energy & Climate

We are aware that our industry has a high level of CO<sub>2</sub> emission levels: global steel production accounts for nearly 7% of GHG man-made emissions. We are transparent about the impact of our operations, we report it, and set actions in order to minimize. There are improvement opportunities we are focusing on, but within the existing processes for steel production possible reductions are more marginal and mostly related to efficiency.

Steel is also part of the solution to the climate change problem of our time, since products made of steel are essential to sustain our society and also are needed for climate change mitigation: wind energy, geothermal projects, infrastructure improvements for climate change adaptation and for CO<sub>2</sub> carbon capture and storage projects.



# 86%

of our employees work in sites  
with ISO 14001 and OHSAS  
18001 certified management systems

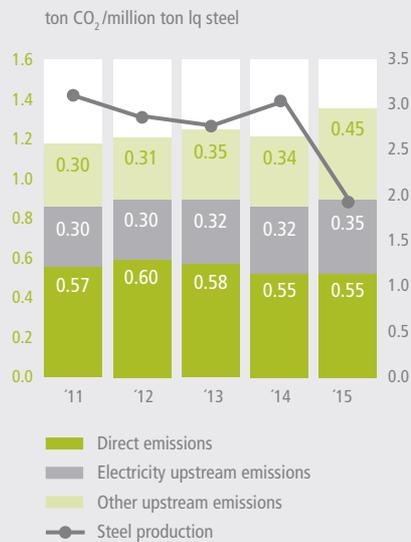
# Environmental Indicators

## Steel Mills Energy Intensity



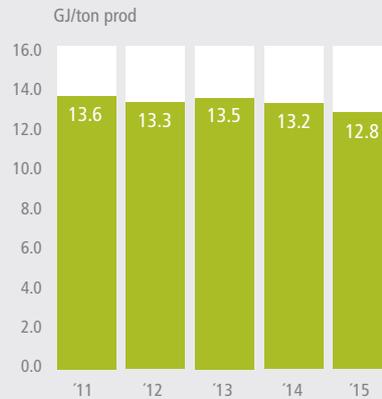
**Methodology:** measured in GJ/ ton steel worldsteel methodology.  
**Boundaries:** steelmaking mills, including all other processes on site.  
**Facilities included:** Siderca, Silcotub Steel Shop, Tamsa, Dalmine.

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



**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, SPII, Silcotub

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



**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, SPII, Silcotub.

Tenaris is participating in industry initiatives to reduce emissions. We supply, for instance, the pipes for the drilling of a carbon capture and storage project in Japan, aimed at storing 100,000 tons of CO<sub>2</sub> per year in two reservoirs, over a three-year project. The project involved the participation of our R&D areas to support the identification and testing of the best materials given the project's environment conditions, where corrosion resistance was of maximum importance.

Tenaris has, over the years, carried out strategic projects to reduce emissions and improve energy efficiency and heat recovery, a better use of resources and reduce waste.

We generated 30% less emissions in 2015 compared with the previous year: our absolute level of emissions decreased by 1,000,000 tons of CO<sub>2</sub>, from 3.700.000 tons in 2014 for our steel making sites. The reduced level of activity had a big impact mainly due to the in-efficiencies for using our installations without a stable level of production together with the modification of emission factors in some ferroalloys caused an increased intensity of around 10%. Energy intensity from all sites, meanwhile, continued to show a slight decrease.

Despite the complex market situation, we have implemented several energy saving initiatives, including improvement in furnaces in Siderca, TuboCaribe, Dalmine, Silcotub, as well as actions to achieve more efficiency in our consumption of electricity.

TuboCaribe, our mill in Colombia, started to operate a new seamless heat treatment and finishing line in March 2015. This means that three old inefficient furnaces were deactivated and replaced by an energy-efficient line. Compared to 2014, this improvement contributed to reducing natural gas consumption per ton of heat-treated pipes by almost 30%, saving the equivalent of 7,000 tons of CO<sub>2</sub> emissions.

We participate in worldsteel's Climate Action Program, and have been recognized for the last 7 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.

After the COP21 Paris agreement, we are committed to work and cooperate with the governments of the countries where we have our production sites in order to implement reasonable and rational policies that help to achieve the objectives established.

#### **Steel recycling**

Steel can be recycled infinitely without losing any of its properties. With 650 million tons recycled every year, it is 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. According to worldsteel, since 1900 the global steel industry has recycled over 22 billion tons of steel. This has reduced iron ore consumption by around 28 billion tons, and cut coal consumption by 14 billion tons. During 2015 we recycled 1.43 million tons of scrap, both internal and post-consumer.

# Environmental Indicators

## Tenaris recycled steel use



**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.

Tenaris uses electric arc furnaces and gas-based direct reduction processes to produce steel. With lower levels of CO<sub>2</sub> emissions, these are considered efficient means of production. The rate of scrap use in our steelmaking process has remained stable over the last years at an average 70%. Around two million tons of scrap are recycled per year at our sites: we collect and reuse all scrap from steel and downstream pipe production, as well as post-consumer scrap.

The recycled content of steel product can range from 5 to 100%. Our Dalmine mill in Italy validated during 2015 its declaration of the recycled content in its products, reaching a minimum of 86.5% of post-consumer recycled material, according to the standard UNI EN ISO 14021.

### Air emissions

Reducing air emissions is a priority for our Environmental Management System, as its potential impact is a primary concern for our communities.

Steelmaking is one of the most relevant processes in terms of air emissions, especially concerning particulate material. Silcotub in Romania has finished the second stage of a USD 9M investment to increase the capacity of its capture and treatment system. Dalmine in Italy completed the improvement of its system with a USD 12M investment. Both sites now have more capacity of capturing and filtering fugitive emissions. During 2016 Siderca in Argentina will undergo an assessment of its system to identify further improvement opportunities in this field.

NOx emission reduction is also part of our improvement plans. We are implementing changes in our furnaces through the use of low NOx burners to allow lower emission levels, better combustion and improved gas consumption efficiency. Our new heat treatment plant in Colombia is also improving significantly 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.

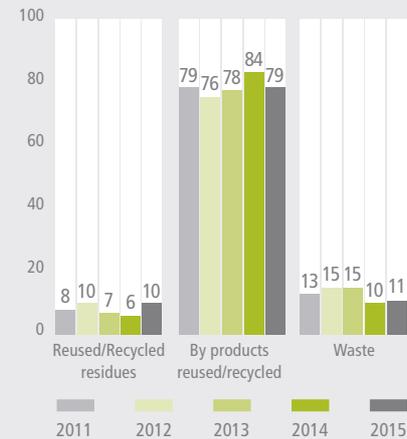
We are also looking at new lines for coating pipes, focusing on minimizing emissions of volatile organic compounds, mainly by switching to water-based products for varnishing, our main VOC source. New coating lines in Silcotub, TuboCaribe and Bay City mills are following this design.

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

Steelmaking is a resource-intensive process that generates large volumes of residues and by-products. We follow up 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 and increase the use and 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, standardize materials to improve their use or implementing 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, NKKTubes, Silcotub.

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

Looking at Tenaris as a whole, in 2015 by-products used decreased a bit as a result of local market considerations. The four-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 its use as products.

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 sold in the market. In our rolling mill in Zalau, Romania, an upgrade of the waste water treatment facility has been performed to minimize contamination of mill scale so that a greater percentage is available to be used in other processes. Silcotub and Siderca are already recycling refractories from the steel mills, meaning 700 tons were not sent to landfills. Dalmine and Tamsa have implemented external recycling. Many other initiatives in different mills are ongoing from alumina recycling, wood reuse as biomass, plastics, etc.



### Water Management

In our steelmaking and seamless pipe production facilities, water management is a significant issue in terms of use and consumption. Water is mainly used for cooling processes in the steelmaking mills and seamless pipe 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 abundant local water availability. It has an open water system, which is used mainly for cooling purposes in the steel and rolling processes. A first-step investment is in the designed engineering phase for a change in the way water is managed at the rolling mills. The project will allow reuse of rolling mills water, improving the general management of the resource as these processes account for most of the water used in the site.

During 2015, we launched a program in our seamless mill in Romania to improve water management from the heat treatment, cold-drawn and threading areas. A total reduction of 30% of water intake per year was achieved through improved operational control and the use of rainwater for processes requiring less water quality.

Our sites located in areas with water scarcity have recycling water systems implemented. We are however looking into ways to continue to improve the way we use and manage water more efficiently.

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

### Reducing noise

Many of our sites are located near residential areas, as the communities historically grew around the mills. We are now working on many sites in order to minimize noise levels at the sources in order to improve the impact on our employees' occupational health and the nuisance that the normal operation of a mill creates in the daily life of our neighbors. Many improvements were achieved in Dalmine and in TuboCaribe. Other sites are also working on internal assessments to define the best areas to seek improvements. Bay City mill has been designed with a completely different approach in terms of pipe handling and movement in order to avoid high levels of noise at source.



**Innovation**

Tenaris  
Dalmine

# Innovation



We invested  
in Research & Development

**USD 468  
Million**

over the last five years

## Helping to transform the industry

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.

Our 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 products.

As our business will only be sustainable if our products contribute to a sustainable world, we are developing life cycle analysis. During 2015 Dalmine, our mill in Italy, has published two Environmental Product Declarations: one for line pipe for onshore and offshore use and another for pipes for mechanical uses. We will continue with other products, as a deeper analysis helps us to find improvement opportunities and continues to build our differentiation strategy.

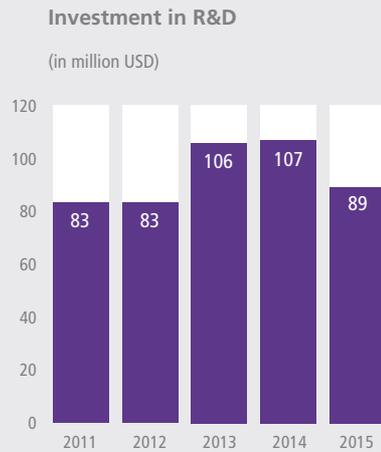
The capacity for innovation and specialization of products and services enable Tenaris to maintain and improve its position in the national and global market. Our value proposition relies on this industrial excellence; our product portfolio, which is the most comprehensive in the industry; and a strong service component that seeks to promote cost-efficiency and a safe and correct use of our products.

Our products have built a reputation over time for their quality and reliability. Our Dopeless® technology has been a pioneer in the industry in the use of dope-free connections for environmentally sensitive and complex operations (See below). Our Research and Development teams work closely with our technical sales teams, who in turn are in constant contact with the customers to identify and propose solutions. We have a network of almost 300 researchers at five R&D centers located in Argentina, Brazil, Italy, Japan and Mexico.

In 2015, we optimized our spending on research and development considering the decline in investment by our customers in the most complex projects. We invested USD 89 million in R&D, roughly 15% less than the previous year but showing an upward trend over the last five years. Our investment in research had topped USD 100 million in the two previous years, as Tenaris increasingly specialized in high-end products. That investment has given us a product portfolio strength that has no parallel in the industry.

We strive to 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. We also seek to protect our intellectual property, from R&D and innovation, through the use of patents and trademarks that allow us to differentiate from our competitors.

## Research and Development



This capacity of being close to our customers both at the global and the local level allows us to deliver innovative solutions, not only in products but also in services. In the current market downturn, we have sought to further integrate product and service into our value proposition in order to give our customers more cost-efficient solutions. The industry is looking into ways of transforming itself to adapt to the new oil price scenario, and we are trying to be part of the solution, streamlining customers' operations and making them economically sustainable.

### **Bringing quality and expertise directly to the rig**

In 2015, we placed a strong impetus on addressing inefficiencies in the supply chain in the United States, where the industry has traditionally worked with third-party distributors, through our Rig Direct™ service program.

Rig Direct™ seeks to create a more efficient supply chain in our industry in order to save our customers' time and money and, at the same time, guarantee the highest levels of safety and environmental compliance.

We synchronize deliveries from our mills and manage the supply of pipes and accessories directly to the rig. The system contributes to a more sustainable, cost-efficient operation, reducing working capital and inventory obsolescence, as well as simplifying operating procedures.

We rolled out Rig Direct™ in the Eagle Ford and Permian regions of the USA, opening new service centers in Freeport and Midland. Midland will be officially inaugurated in the second half of 2016. By the end of 2015, we were supplying 50 rigs. Our Bay City mill in Texas, scheduled to start operations in 2017, is the heart of our Rig Direct™ program.

Being closer with the products and reducing the time it takes for the pipes to make it to the rigs, we improve logistics and minimize the handling of products, as well as waste.

With the Rig Direct™ service program, our experts in pipe materials and performance, material supply, inventory management and preparation for use help customers to achieve the most efficient operations all the way to the well. From technical consulting and pipe management to the actual services on the field, this helps customers reduce the total cost of their operations, maximize safety, minimize environmental impact and optimize the use of their materials.

We are also introducing new information technologies to better assist our customers with data about our products during their use. Our PipeTracer™ is a unique tracking and traceability application that allows operators to identify Tenaris products on-site with mobile devices. By scanning codes located on the pipe body and thread protectors, customers can download product information, create digital tallies and generate Excel spreadsheets specific to the operation.

#### **Technology for safer, cleaner and more reliable operations**

Our Dopeless® technology continues to be a landmark in the industry in terms of a technological solution that seeks to guarantee that operations are safer, cleaner and more reliable for our customers.

The creation of his dope-free solution and its manufacturing was the result of close work with a customer in the North Sea over a decade ago, as we jointly strived to find solutions for a concrete situation. Over the years, we have sold more than 500,000 tons of Dopeless® technology products for the most complex applications worldwide.

Dopeless® technology is a dry, multifunctional coating applied to TenarisHydril premium connections on dedicated production lines at Tenaris's mills worldwide. The Dopeless® solution provides important operational benefits. For example, the technology reduces make-up problems, increasing the reliability of the installation and cutting running times.

It also provides important safety benefits, as it creates a clean, non-slippery surface during operations. Being a zero discharge technology, it also minimizes the environmental impact in the field.



# Human Resources

# Human Resources

## More focused to weather the downturn

Our employees are the most important source of our strength and our competitive edge. Tenaris has grown to become a global leader thanks to the work of a team that has expanded and continues to expand its knowledge, execution capacity and diversity.

The market downturn facing our sector is driving us to review every aspect of our cost structure, including our human resources. Like every player in the oil and gas sector, we have had to make difficult decisions, as we adjusted our budgets to the new levels of activity and the structural changes that are taking place in our market. We have sought to adapt our activities without affecting the fundamental values and management principles that have guided us through the years and taken us to where we are.

The concrete result of that guiding principle is that we have continued to carry out all the programs designed to help our employees develop their careers. Most of them have seen the number of editions or number of participants adjusted to match the shrinking nature of our market's situation and our level of activity. But we remain committed to giving our employees, current and potential, the opportunity to grow their careers in a challenging and stimulating professional environment.

### Employee engagement: Opinion Survey

We adapted to this market downturn trying to minimize the impact of the crisis on our people and to preserve our values and our identity. We put significant effort into keeping our people engaged and committed.

We have sought to be fully transparent with our employees and with the communities about the measures we had to take in order to tackle our sector's change of circumstances and make our company sustainable in the new scenario. Both internally and externally, we have reinforced our communications to employees and provided details about the decisions we have had to take. Our top management incremented their engagement in periodic communications routines, including Town Hall meetings and webcasts, to explain the state of the market and the company's strategy.

The opinion of our people is an essential indicator of the quality of our management, and our commitment is to listen to them and to act accordingly. In 2015 we held our biennial opinion survey, which had the strongest employee participation (85%) since we first conducted it in 2008.

Survey responses showed in general an improvement when compared to the results posted in 2012, but a decline versus the simplified survey (Mid-Cycle Survey) we conducted before the crisis, in March 2014. In comparison to the 2012 survey and taking into consideration the difficult circumstances, over 41 comparable questions, 30 had a higher favorable response (agree and strongly agree) while five questions had a lower rate of favorable response.



Employee Opinion  
Survey 2015

**85%**  
participation

# Human Resources Indicators

## Total hourly and salaried employees

In thousands of people



# Human Resources Indicators

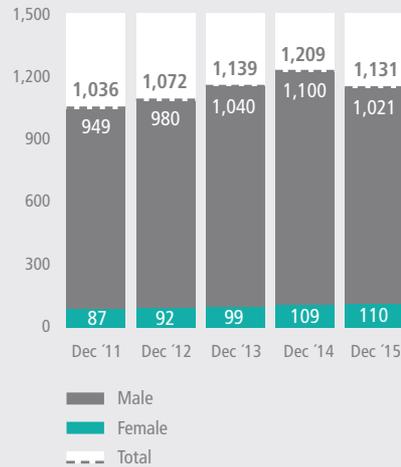
## Salaried employees by gender

In thousands of people



## Managers by gender

In number of people



We obtained the best results in our human resources management, performance evaluation, internal communications, in the recognition of technical and operational functions, in safety and quality and in diversity. And we found opportunities for improvement in process simplification and development opportunities. With the detailed analysis of the survey's results, we will prepare an action plan designed to improve our employees' engagement. The actions included in the plan are tested in the following survey, two years later.

#### **Performance management**

Our PMP Performance Management Process is designed to help employees assess their own progress, strengthen the supervisor-employee relationship and reward individual and group merit. It is regularly updated so that it is aligned with Tenaris's business needs, industry best practices and recommendations made by employees in the biennial survey.

The PMP has become a pillar of the company's human resources processes. In 2015, employee participation in the performance management process also saw an increase. In 2015, all salaried employees were evaluated: work plans were defined for 98% of them and 78% worked together with their supervisors to complete Individual Development Plans (IDPs).

Upward feedback was introduced into our performance management process in 2012. Employee participation in 2015 showed it has gained credibility among our people. The number of employees who gave upward feedback about their supervisors grew from 56% in 2014 to 90% in 2015, and the number of supervisors who received upward feedback went up from 81% to 96%.

#### **Our corporate university turns 10**

One of the cornerstones of our employee development policy is our corporate University, TenarisUniversity, which turned 10 in 2015. TenarisUniversity is responsible for strategically integrating, aligning and disseminating knowledge and expertise across the company.

A decade after its foundation, TenarisUniversity has 15 regional centers, its six schools deliver over 1.2 million hours of training per year, it has organized 42 TUIC Induction Camps for global trainees, 27 Management Development Programs (MDP) for potential managers, 14 Advanced Management Programs (AMP) for middle managers and three Leadership Programs for top managers. Besides, more than 400 hourly employee courses have been translated into the company's eight official languages and 50 development plans have been designed.

In spite of the company's budget adjustment, TenarisUniversity has continued to conduct all its programs, focusing on the new demands that the market is placing on our organization. The overall amount of training hours per employee has decreased by 10% this year, but we increased our average training for hourly employees. The reduced level of activity in our mills also gave us an opportunity to strengthen on-the-job training activities. Each hourly employee received an average of 39 hours of training in 2015, up from 32 hours a year earlier.

# Human Resources Indicators

## Employee participation in TUIC, MDP and AMP courses

Participants per course

Year	AMP	MDP	TUIC
2011	35	151	234
2012	47	119	170
2013	81	176	241
2014	79	255	233
2015	52	56	180

AMP: Advanced Management Program  
 MDP: Management Development Program  
 TUIC: TenarisUniversity Induction Camp

## Tenaris Salaried Employees

Year	% approved workplans	% approved IDP
2011	76	41
2012	86	42
2013	89	51
2014	98	76
2015	98	78

IDP: Individual Development Plan

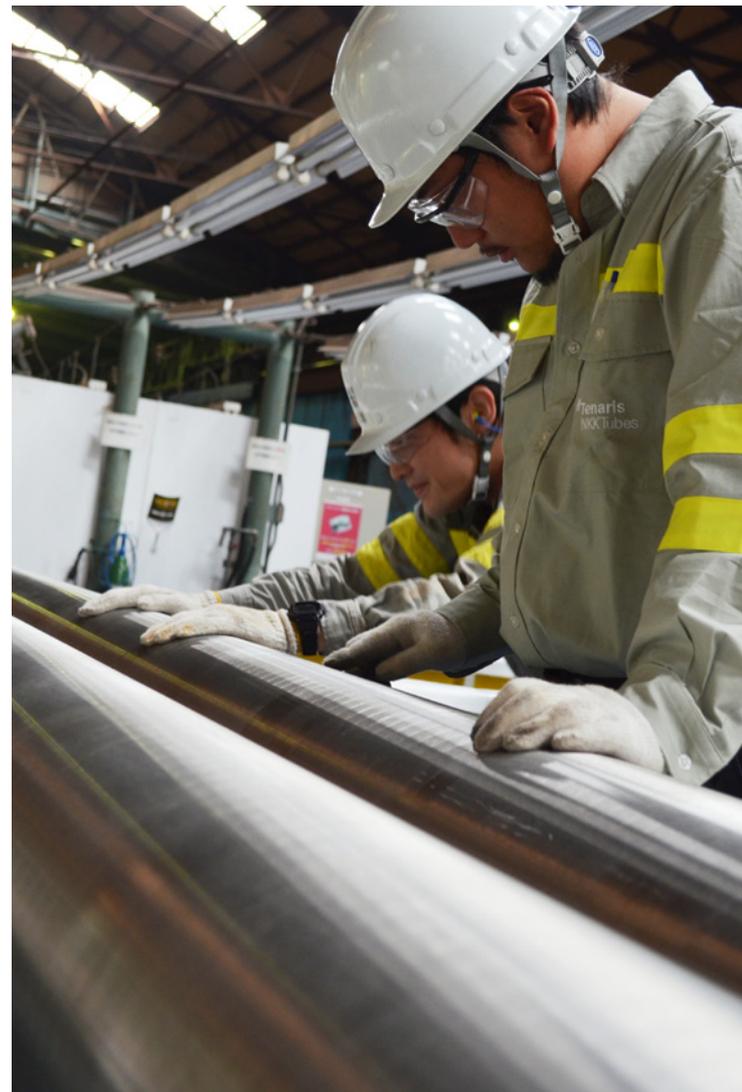
## Upward Feedback

Year	% of supervisors that received UF	% of employees who provided UF
2012	66	40
2013	76	53
2014	81	56
2015	96	90

## Employee Opinion Survey Participation

Year	Target population	Rate of participation (%)
2008	6,817	80
2010	6,892	76
2012	7,646	80
2014*	7,903	74
2015	7,534	85

\* Mid-Cycle Survey

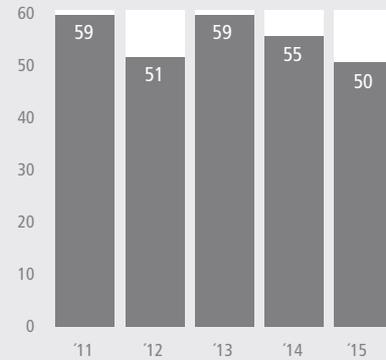


We continued to conduct our training programs for salaried employees at the different levels of their careers: the TenarisUniversity Induction Camp (TUIC), our one-month program for global trainees; the Management Development Program (MDP) for mid-career professionals; and the Advanced Management Program (AMP) for managers. We also organized three editions of our International Orientation (IO) program, a week-long program for new mid-career employees; and a third edition of our Leadership Program (LP) for top managers. Each of these programs was conducted in different countries, as a reflection of Tenaris’s geographical and cultural diversity: the TUIC and MDP are conducted in Campana, Argentina, the AMP is held in the United States, the LP in Italy and the IO in Romania.

In April 2015, TenarisUniversity opened a new campus in our mill in Zalau, Romania. The event also marked the 10th anniversary of Tenaris’s presence in the country. The new 2,500-square meter building has two amphitheatres, three training rooms, another three technical and IT labs, two conference rooms and office space. It was build for a total investment of USD 14 million. Zalau’s is TenarisUniversity’s fifth campus in a list that also includes premises in Siderca in Argentina, Confab in Brasil, Dalmine in Italy and Tamsa in Mexico.

## 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.

Through the years, TenarisUniversity has incorporated the most innovative training techniques. Under the collaboration agreement we reached in November 2013 with edX, an educational institution created by founding partners Harvard and the MIT, we launched four Massive Online Open Courses (MOOCs) on Computer Numerical Control (CNC), Introduction to Steel, Introduction to Oil Country Tubular Goods (OCTG) and Introduction to Running Pipe in Oil and Gas Wells.

These courses are open for everybody to take online in edX's platform. The completion rate of Tenaris's four MOOCs reached 24%, well above the average edX courses' rate of 5%. In total, 41,000 people (average age 27) in 136 countries participated in the online courses. Tenaris's work with edX received in December 2015 a "Gold" Optimas award from the Human Capital Media (HCM) publication Workforce. In this context of innovation, we are now engaged in reorganizing and updating our training materials in order to introduce the most effective learning techniques.

The 50-year-old professional development Training magazine placed Tenaris eighth in a 125-company ranking that looks into employee training and development practices. Tenaris applied to the ranking for the second time in 2015.

#### **Growing in diversity**

Diversity continues to be a driver of our Human Resources policy. Tenaris is an equal opportunity employer and aims to foster a work environment that attracts and develops talents across all genders, nationalities, generations, cultures and backgrounds for the long-term sustainability of the company.

Born from the alliance of three companies in Argentina, Italy and Mexico, Tenaris has grown over the last two decades to become a truly global company, with 67 nationalities represented among our staff. We believe in creating more diverse teams in terms of gender, culture and nationalities as a key to preparing Tenaris for the challenges ahead. Tenaris's Diversity project is guided and supported by a global steering committee composed by Tenaris's executive management to ensure alignment of the project's principles and initiatives with the company's business strategy.

In 2015 we continued to expand the scope of our Diversity program, launched originally in 2008 with a focus on gender diversity. We launched an internal website (Diversity+) to raise awareness and share experiences about diversity stories and experiences in the company. TenarisUniversity also developed a special training program dedicated to diversity issues, including courses on introduction to diversity and management of global teams. We are planning on expanding this curriculum and are already developing new courses with even more specific content on the management of cultural mix and leading diversity. We plan to launch these new courses in 2016.

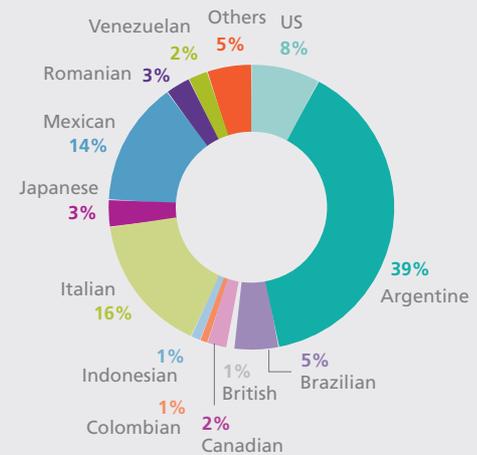
The Diversity program also includes a flexible work program, an ambassador program to support the recruitment of a more diverse workforce and infrastructure upgrades in production centers and offices to improve working conditions for female employees.

## Human Resources Indicators

Employees by nationality

Argentina	5,395
Brazil	2,011
Canada	531
Colombia	667
Indonesia	532
Italy	2,045
Japon	522
Mexico	5,195
Romania	1,639
Estados Unidos	2,050
Others	1,164

Managers by nationality





# Community Development

# Community Development



Investment  
in Community projects

## USD 86.7 million

between 2011 and 2015

Our community work follows the values and heritage of the Techint Group, our parent-organization. We believe that the development and sustainability of an industrial project like ours depends on the support of the community around it, which has to grow with the project.

Despite the downturn in our industry, in 2015 we maintained our budget for community programs and activities at a similar level to previous years, and in most of the programs the number of people impacted has increased.

We continue to place most of our efforts on education. We invested 56 percent of the total USD 11.9-million community budget in education programs, as we believe it is the main driver of social mobility and inclusion based on merit. Culture is also an important aspect of our work, as we seek to encourage diversity and cultural integration.

We are increasingly encouraging our employees to engage proactively in our communities via volunteering programs, which we organize periodically in Canada, the United States, Brazil, Colombia, China, Romania, Japan and Argentina. Our goal is to strengthen the bond between the company, employees and the community. More than 1,100 employees volunteered to participate in community activities last year, dedicating their time off work to refurbish school buildings, give motivational talks to students, give students support classes or take part in environmental educational activities. Tenaris invested a USD 229,000 budget to back these activities in 2015. We will continue to encourage these activities, which create a strong bond between our employees and the communities.

### Technical education for industrial progress

Being an industrial project, our investment in pre-university schooling focuses on technical education. We seek to bridge a growing gap that exists between the education students receive and the technical skills that are needed to have a quality job in the industrial sector.

Along with our sister company Ternium, we have gone forward with the construction of a network of state-of-the-art technical schools, the first of which was inaugurated in the city of Campana, Argentina, in 2013. Construction of the second in Monterrey, Mexico, started in mid-2015 and the school is expected to open in August 2016. The school network is named after one of the founders of the Techint Group, Roberto Rocca.

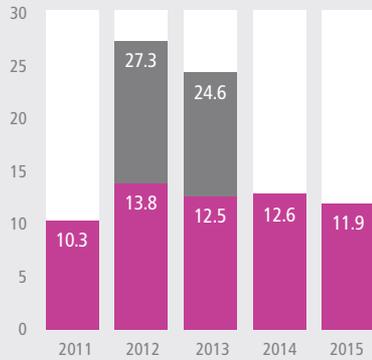
The school in Argentina had 173 students by December 2015. It is expected to reach its full capacity by 2019, with 420 students, as the school incorporates 60 students ever year. An average 250 students apply to join the school every year.

The Roberto Rocca Technical School in Campana is also serving as a hub for the creation of knowledge and content for technical education. Its staff participated in the creation of a Massive Open Online Course (MOOC) on Computer Numerical Control as part of an agreement our corporate university, TenarisUniversity, reached with the online teaching platform edX.

# Community Indicators

## Investment in the Community

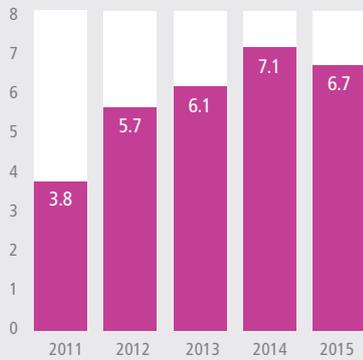
(in million USD)



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)



Last year, the Roberto Rocca Technical School implemented a teachers' performance evaluation system designed with the support of Phd. Alejandro Ganimian, a Harvard graduate and member of the Gates Foundation Measures of Effective Teaching (MET) project. The system consists of opinion surveys and standardized tests on students, on-the-ground class observation and evaluation of the school's principal. The results help us to better plan and design the school's activities.

In 2006, we created a program called Technical Gene, which provides support for infrastructure and equipment, as well as teachers' training, school management training and on-the-job training internships for high school students. The number of students covered by the program increased by more than 30 percent in 2015 to reach 2,002 in 11 schools over six countries.

### Growing support for elementary education

Our education programs cover the entire schooling cycle, from elementary to higher education. Over the last years we have placed strong emphasis on our AfterSchool program, which offers extra learning and enriching activities for elementary students of single shift schools (four hours a day) in communities where we have our operations. The program provides three extra hours of non-formal education, four days a week.

The number of children covered by the program has more than tripled over the last three years (See graph).

We find the AfterSchool program crucial for the promotion of social inclusion in our communities and set a more solid base for the rest of the student's learning life. This is particularly important in many Latin American countries where high school drop-out rates or academic performance still has plenty of room for improvement.

#### A reward for merit in high school

The Merit Award was established in 1959. It is the oldest of our community programs. It was initially designed to help the children of our employees go through high school education via financial reward based on their performance. In 2007, we opened this program to the entire community. The aid is allocated based on academic grade performance and engagement in the education process, attendance and discipline. In 2015, Tenaris increased by 15% the number of awards granted and we continued to expand the geographical reach of the program, incorporating three new countries on the list (Nigeria, Mexico and the United States).

#### Higher education: the Roberto Rocca Education Program

Over a decade old now, the Roberto Rocca Education Program was founded in 2005 to promote the study of engineering and the applied sciences at undergraduate and graduate level in countries where the Techint Group has a major presence. The program has two main components: Fellowships, for students pursuing PhDs at universities outside their country of origin; and Scholarships, for undergraduate students at universities in their home country.

In 2015 the program invested USD 2.29 million to fund 23 new Fellowships for students attending universities and 596 Scholarships for undergraduate students at 90 universities around the world. Over the last decade, the program has granted 3,434 scholarships in 17 countries.

#### The Roberto Rocca Education Program

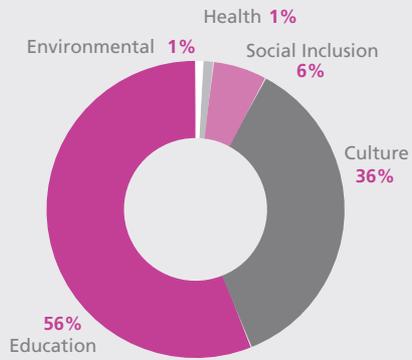
Active scholarships and fellowships during the period

	2011	2012	2013	2014	2015
<b>Fellowships</b>					
Global	35	28	27	26	25
<b>Scholarships</b>					
Argentina	264	261	210	214	182
Brazil	40	40	39	39	27
Canada	15	15	18	15	11
Colombia	25	22	27	31	32
China	20	18	18	15	19
Ecuador					5
Ghana		3	4	4	
Guatemala	5	5	5	5	5
Indonesia			6	6	6
Italy	45	45	45	45	45
Japan	11	7	8	9	8
Mexico	161	168	166	166	173
Romania	42	40	40	40	41
UK		2	2	6	2
Uruguay	6	0	3	3	6
USA	14	19	25	26	34
Venezuela	15	10	5	5	
<b>Total</b>	<b>663</b>	<b>655</b>	<b>621</b>	<b>629</b>	<b>596</b>

## Community Indicators

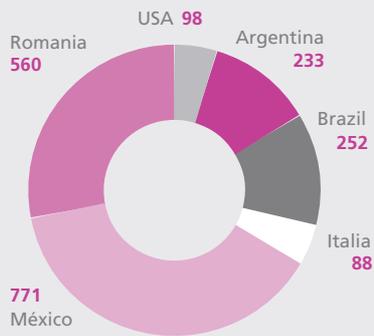
### Investment by area

2015



### Technical Gene Students impacted by country

2015



Total 2,002

## Community Indicators

### AfterSchool program, students by country

Students

Community	2013	2014	2015
Veracruz, México	140	261	235
Campana, Argentina	85	81	122
Zalau, Rumania		101	130
Cartagena, Colombia			70
Pindamonhangaba, Brazil		22	95
<b>Total</b>	<b>225</b>	<b>465</b>	<b>652</b>

### Merit Awards by country

Country	2013	2014	2015
Argentina	321	296	296
Brazil	200	200	200
Canada	50	60	60
Colombia		50	50
Indonesia		198	207
Italy	45	78	68
Mexico			101
Nigeria			20
Romania	222	297	331
USA			25
<b>Total</b>	<b>888</b>	<b>1,179</b>	<b>1,358</b>

**Cultural activities to foster identity and diversity**

In 2015 we allocated 36 percent of our community budget to cultural activities. We continue to focus our cultural work on the promotion of identity and diversity, as we want the different communities where we live and work to know themselves better and to better understand each other.

Film festivals and photo libraries are the backbone of our cultural activities. In this period, we organized Latin American film festivals in Argentina, Colombia, Italy, Romania and the United States. A total 10,690 people attended them.

We also opened a new photo library, in Uruguay's capital Montevideo, which joins another four in Argentina, Brazil and Mexico. The next one is scheduled to open in the United States, where Tenaris is expanding with the construction of a new seamless pipe mill in the town of Bay City, Texas.

The libraries are the result of close joint work with the community in the collecting, digitalizing and archiving the history of the cities. They follow the lead taken by Fondazione Dalmine (Dalmine Foundation), which opened in 1999 and is tasked with compiling and preserving the historic photographic archive of our industrial facilities around the world.

We recognize culture as a source of innovation in our communities. Tenaris and its sister companies in the Techint Group sponsor Fundación PROA in the neighborhood of La Boca in Buenos Aires, Argentina, a major hub for contemporary and modern art; and Galleria d'Arte Moderna e Contemporanea (GAMeC) in Bergamo, Italy.

PROA's programming in 2015 included a variety of local and international artists, the Lebanese-born Palestinian video artist and installation artist Mona Hatoum, the Daros Latinamerica Latin American art curators, the multidisciplinary group of architects, filmmakers and city planners Forensic Architecture, the Delhi-based Raqs Media Collective group of media practitioners and the English conceptual, video and installation artist Jeremy Deller, among others.

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