

# Towards the future of sustainable steel industry

#### → Decarbonization strategy

We are committed to developing long-term sustainable business by reducing our environmental footprint within our communities and value chain; working with partners and peers to address the climate change challenge and transition to a carbon neutral economy.

We aim to achieve 30% reduction of  $CO_2$  by 2030 compared with 2018 by using a higher proportion of recycled steel scrap in the metallic mix, investments to

increase energy efficiency, and the use of renewables for part of our energy requirements as well as the development of technologies involving the use of hydrogen and carbon capture.

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

#### → Highlights

30%

**BY 2030** INTENSITY REDUCTION TARGET IN CO<sub>2</sub> TN / TN STEEL COMPARED WITH 2018 Scope 1, 2 & 3 (raw materials)

2020 data

10%

**REDUCTION** IN ton CO<sub>2</sub>/ton STEEL IN 4 STEELMAKING FACILITIES VS 2019 82%

RECYCLING CONTENT IN OUR STEEL PRODUCED THROUGH THE USE OF ELECTRIC ARC FURNACES (EAF) 98.9%

MATERIAL EFFICIENCY AT STEELMAKING SITES

#### → Electric arc furnaces for circular, low-emission steel

EAF is the least  $CO_2$ -intensive steel production route, generating lower  $CO_2$  emissions than the usual steel making furnace technologies used in the industry (e.g. Blast Furnace BF-BOF), through the extensive use of recycled steel scrap. The  $CO_2$  emission intensity from our four sites with steel-making processes and rolling facilities was 1.3 tons  $CO_2$ /ton steel in 2020, well below the global steelmaking weighted average reported by the World Steel Association (1.89 tons  $CO_2$ /ton of cast steel) considering scope 1, 2 and 3.



#### Recycling content

Our life-cycle approach to scrap recycling helps minimize the environmental footprint of our operations, also a key opportunity for the steel industry to reduce CO<sub>2</sub> emissions, based on current technology. Scrap can be made into new steel as closed material loop recycling, avoiding primary steel production.

recycled content of steel produced at our facilities

/ million tons of scrap recycled to produce

new steel

### Air quality

More than 10 years of continuous investments in steel shop, rolling & finishing mills to reduce emissions of particulate matter and volatile organic compounds (VOC), which have led to a marked improvement in the air quality for our employees and the communities where we operate our steel shops. Particulate material emissions from our steelmaking stacks have fallen from an average of 100g/tn of product in 2016 to 11g/tn of product in 2020.

## million USD

invested in our Tamsa facility in Mexico to upgrade the capture and treatment system for steel shop emissions

#### Material efficiencv

Our four steelmaking sites reached a material efficiency value that measures the percentage of materials converted to products and co-products of 98.9% vs 97.86% worldsteel average for 2020. We reuse and recycle residue and co- products to cut waste: during 2020, we sent 8.3% of all residues produced to landfill, a drop of almost 20% compared with 2019.

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

material efficiency rate in 2020

#### Water management

Water plays a major role in steel manufacturing processes. Tenaris is aware of its responsibility for managing water resources and is constantly evaluating how best to conserve and reuse water.

We are committed to minimize water intake in water scarce areas where we have water intensive operations and to implement the best water-management technologies.

25%

reduction in surface water intake since 2018 at Siderca rolling mill

water recycled by the Bay City mill in the U.S.

## Certifications

HSE standards and objectives integrated into all management processes.



Sustainability Champion Awards from World Steel Association since 2017.



Sustainability Reports aligned with GRI standards.

ISO 14001, ISO 45001 (or OHSAS 18001), ISO 50001\* Certifications.



Since 2009, Climate Action Recognition award granted by World Steel Association, for its participation in the CO<sub>2</sub> data collection program.



Sustainability Accounting Standards Board.

LEED® Certification on main greenfield projects.



Signatories of the Global Compact with the commitment to contribute to the UN SDG.

#### TCDP

Carbon Disclosure Project (CDP): score B in 2021.

#### **Environmental** Product Declaration

Based on Life Cycle Assessment, Tenaris issued certified Environmental Product Declarations (EPD) for its OCTG, offshore and onshore line pipe products, structural tubes for offshore and onshore applications, power generation tubes and large vessels.

EPDs disclose in a transparent, objective and standard way the environmental credentials of our products, measuring the impact of a ton of steel pipes in terms of air emissions, energy use, climate change, the recovery of co-products and water use.

