

COMPANY COMMITMENT ON
CLIMATE CHANGE

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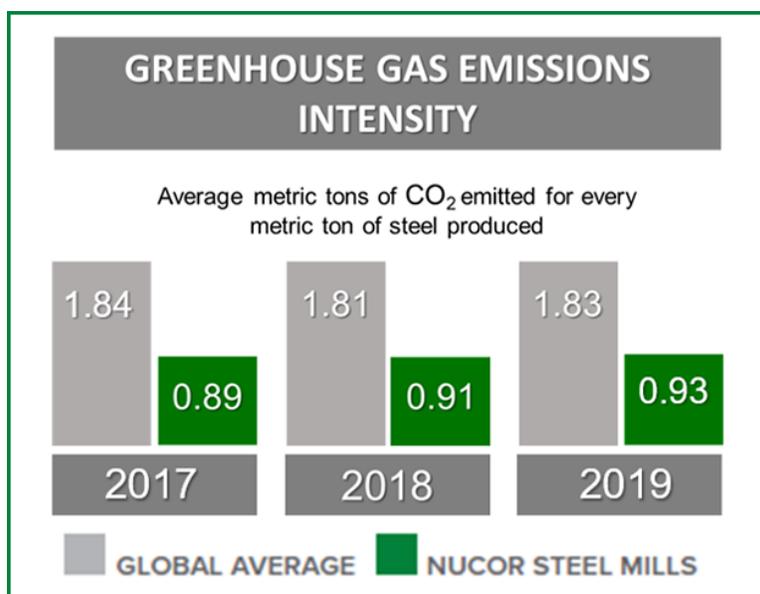
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INTRODUCTION

Nucor is committed to protecting the health and safety of the communities both where our facilities are located and globally. We take our responsibilities seriously and we are continuously evaluating how we can safely produce steel in a more energy efficient manner and reduce the greenhouse gas (GHG) emissions associated with our activities. This is fundamental to who we are as a company and we believe it benefits all our stakeholders.

We are proud of our heritage as an innovative disruptive force in the evolution of steelmaking. Nucor has played a major role in the documented reduction of GHG emissions associated with steel manufacturing in North America. The North American steel industry has achieved a 35 percent reduction in energy intensity and a 37 percent reduction in GHG emission intensity since 1990. Over that period, Nucor's steel production – exclusively produced using Electric Arc Furnace (EAF) technology, with its lower carbon footprint compared to blast furnaces (BFs) – has increased from 2.8 million tons in 1990 to approximately 23 million in 2019. Such steel production now composes approximately 26% of the steel produced in the U.S.

Our EAF production technology uses post-consumer scrap steel material as its most significant raw material. Nucor products contained approximately 71% recycled content in 2019. Our innovations in mini-mills have slashed the environmental footprint of steel production, and associated energy consumption and GHG emissions. Nucor steel production delivers approximately 50% less GHG emissions than Basic Oxygen Furnace (BOF) based steelmaking technology in total (Scopes 1, 2, and 3). While Nucor makes approximately 26% of the steel produced each year in the U.S., we estimate that we are responsible for only 7.5% of the domestic industry's direct GHG emissions.

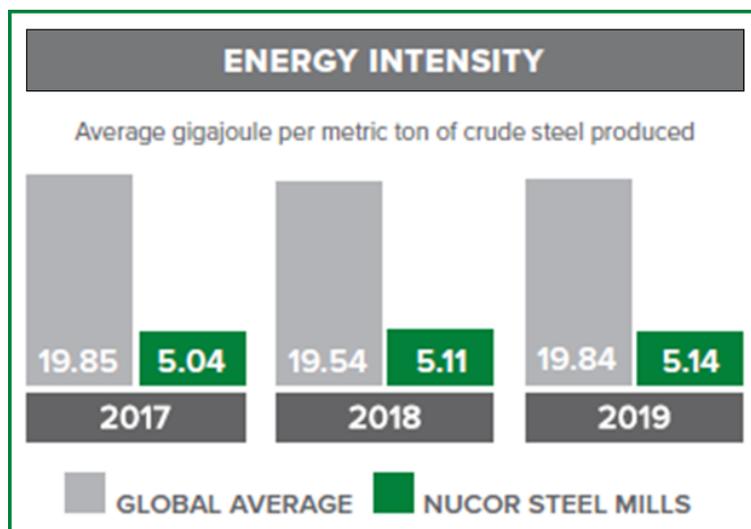


Notes: GHG intensity inclusive of Scopes 1, 2 & 3. Nucor data is comparable to the methodology established by the World Steel Association (WSA). Global data is sourced from WSA's "Sustainable Steel Indicators 2019 and Industry Initiatives." For more information visit www.worldsteel.org.

The International Energy Agency (IEA) has developed a Sustainable Development Scenario (SDS) that represents its assessment of how the global economy can evolve to meet the United Nations' Sustainable Development Goals (SDGs) that are most closely related to energy. The three relevant SDGs are:

- 1) Achieve universal access to energy
- 2) Reduce the health impacts of air pollution
- 3) Tackle climate change

To address climate change, the IEA has stated that, "The energy intensity of crude steel needs to decline by 1.2% annually during 2018-30 to attain the SDS level." ¹ Nucor believes that its energy intensity at present is more than 70% lower than the global average for steelmaking, and therefore is consistent today with the IEA's SDS derived 2030 target for the industry.



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In its June 2020 Tracking Report for the Iron and Steel sector, the IEA states that, "Scrap inputs should account for over 40% of total crude steel production."² As mentioned above, Nucor steel currently is composed of more than 70% recycled scrap.

LOOKING AHEAD

While we are proud of our efficiency and track record, we are not satisfied. A key component of Nucor's success over the years has been our culture of continuous improvement, built on a foundation of trust among our teammates, and our performance-based compensation systems. These drive us forward and enable us to regularly outperform even our own expectations and produce more with less.

¹ IEA (2020), Iron and Steel, IEA, Paris <https://www.iea.org/reports/iron-and-steel>

² Ibid

We produce essential materials in environmentally friendly ways based on currently available technology. For the foreseeable future, we expect that the steel sector's global GHG emissions will remain difficult to abate, and that our EAF-based approach will remain the most viable means of producing steel in the U.S. for its efficiency, flexibility and environmental attributes. For these reasons our efforts to reduce our GHG emissions and our impact on climate change will focus primarily on becoming even more energy efficient in all aspects of our business. We will also:

- 1) support the continued growth and development of clean power generation in the U.S.;
- 2) explore the feasibility of capturing and storing our CO₂ emissions;
- 3) monitor and evaluate newer technologies in steelmaking that may eventually enable step change reductions in the industry's GHG intensity.

We are encouraged by technological developments over the past several years that have significantly improved the cost competitiveness and reliability of carbon-free clean power generation. As renewable and nuclear energy power generation and power storage technologies continue to improve, we expect that an increasing portion of our electrical load will be supplied from carbon-free resources, and we are taking concrete steps to help support the transition of the U.S. power grid to a greater reliance on these technologies.

On November 13th, 2020, we announced Nucor's first virtual power purchase agreement (VPPA) and the largest VPPA announced by any steel producer so far. Nucor has agreed to a 15-year offtake agreement with EDF Renewables for a new 250-megawatt solar facility to be constructed in Texas. Once completed, the expected output of the solar facility will be the equivalent of the electricity consumed by nearly 67,000 U.S. households in an average year. The anticipated initial commercial operation date for the facility is mid-2023.

Our new rebar micro-mill in Sedalia, MO will source carbon-free renewable power generated by the Cimarron Bend wind farm, via a power contract with Evergy, its local electric utility.

Another example of current clean energy generation in Nucor's portfolio can be found at our Vulcraft facility located in Chemung, New York. A 2.2 MW DC roof mount solar power system is located on-site and composed of approximately 3,960 solar panels and produces 2,553 MWh per year.

We will continue to explore clean power opportunities via VPPAs, "behind-the-meter" solutions, energy storage potential, and through other approaches as we go forward. We are optimistic about the continuing robust demand we see for our steel and steel products to enable the ongoing buildout of clean power generation and transmission assets in the U.S.

We believe it is likely that meeting the challenges of climate change will require fully developing Carbon Capture Utilization and Storage (CCUS) technology and are exploring the implementation of this in our operations.

We are also exploring several emerging steelmaking technologies aimed at sharply reducing the industry's GHG intensity, but we do not believe they are fully developed enough to be technically

and commercially viable at this time. Going forward we plan to allocate additional resources to evaluating potential technological innovations that show promise, and we may also consider a limited number of investments to support these initiatives and better position Nucor to benefit from any breakthroughs.

Nucor has been an early adopter and industry innovator by embracing and developing transformational new technologies, including EAF-based steelmaking itself more than 50 years ago in South Carolina, and EAF-based production of sheet steel via the industry's first successful Compact Strip Mill (CSP) at Crawfordsville, Indiana in 1989. Our success with CSP sheet steelmaking has been replicated by us throughout our operations and by others around the world, resulting in significantly reduced energy intensity for the industry over the years.

More recently, Nucor has led the industry with its development of the capability to produce its own Direct Reduced Iron (DRI) as a scrap substitute for a portion of its raw material requirements. The IEA has noted that “[industry] emissions can be reduced in the short term by increasing gas-based DRI production, which is less emissions-intensive than coal-based BF-BOF production and currently accounts for about 5% of steel production.” The IEA has also observed that “DRI has the advantage of being easier to retrofit with CCUS or to transition to hydrogen inputs.”³

SETTING GHG REDUCTION GOALS

While Nucor has determined that setting an aggressive companywide goal for reducing GHG emissions would not be appropriate at this time, we will continue to evaluate this and may elect to do so in the future. Before setting any such target, we believe we should be confident that it is both achievable and represents a meaningful improvement in our already industry-leading performance in this area.

EAF-based steelmaking is a relatively mature technology. The energy efficiency initiatives we are pursuing as our primary method to drive further reductions in our GHG emissions will likely lead to gradual progress, rather than sharp reductions in the near term. The benefits of transitioning to more clean power, and the pace of any related technological advances will also likely be gradual, as well as difficult to predict.

The progress we are making at reducing our GHG intensity can also, at times, be obscured by fluctuations in the business cycle or our product mix:

- A. As business conditions change, so does our capacity utilization in our steel mills. At lower levels of utilization, we are less energy efficient and more GHG intensive.
- B. Our strategy of growing our domestic market share by producing more value-added steels can also sometimes lead to incremental increases in GHG intensity for the Nucor steel mills producing these higher-value products. In many cases however, our

³ IEA (2020), Iron and Steel, IEA, Paris <https://www.iea.org/reports/iron-and-steel>

teammates have been able to offset this through efficiency gains elsewhere in our operations. It is also worth noting that as we change our product mix to include more value-added steels, we expect to displace an increasing share of BOF-based steel products which are much more GHG intensive. As it has for decades, Nucor's growth will result in a further reduction in the overall GHG intensity of the domestic steel sector.

The more advanced, valued-added steels Nucor is developing are in many cases an important part of our customers' efforts to reduce the GHG emissions associated with the consumption and operation of their products (i.e., their Scope 3 emissions). The best example of this is the stronger, lighter, next generation sheet steel grades that Nucor produces for our automotive and other customers.

ENERGY EFFICIENCY MEASURES AT NUCOR

Because one of our core beliefs at Nucor is practicing good environmental stewardship, all of Nucor's steel mills are ISO 14001 certified and employ energy efficiency and emission reduction strategies specific to each division. Nucor regularly invests substantial capital to modernize its operations. These investments frequently result in the installation of technologies that allow us to produce steel and steel products at lower emission rates.

Nucor's performance driven culture and our incentive compensation system consistently motivate our teammates to find new ways to safely produce high-quality products while using less energy. These efforts result in lower costs, enhanced profitability, and better environmental performance. As cost effective or revenue enhancing technological advancements become available to our industry, Nucor will continue to prioritize investments to reduce waste and emissions and protect the environment, while profitably growing its businesses.

Processing steel through EAF operations requires significant amounts of electricity and natural gas. Reductions of electricity consumption and natural gas combustion provide for additional opportunities to limit the emissions of GHGs from Nucor steel mills.

To achieve GHG emissions reductions, each Nucor steel mill evaluates, on an ongoing basis: its electricity and natural gas usage; as well as its carbon usage, its raw material mix and the thermal efficiencies of its processes.

Some non-exhaustive examples of initiatives that have yielded significant gains in energy efficiency and reduced GHG intensity at our steel mills follow here:

At our sheet group rolling mills, Nucor has replaced hollow, water cooled rolls with dry rolls. Although dry rolls entail a higher upfront cost, this initiative has dramatically reduced heat loss in our rolling mills from over 200,000 BTUs/hour to under 10,000 BTUs/hour per roll.

Our new rebar micro-mills in Sedalia, Missouri (commissioned 1st Qtr 2020) and Frostproof, Florida (commissioning 4th Qtr 2020) are excellent examples of designing for efficiency. The nearly identical mills have a much smaller overall footprint than our older

bar mills and incorporate a continuous caster along with the continuous rolling of the cast billet. This eliminates the need for an integrated gas-fired reheat furnace, thereby reducing natural gas requirements by more than 75%.

Nucor mills use 3-dimensional (3D) scanning and imaging of refractory inside their furnaces. This state-of-the-art 3D monitoring is critical to safely and cost effectively determining the remaining life of the refractory and scheduling preventive maintenance activities, which enables increased thermal efficiency of our melting process.

To better understand air flows and heat exchange, Nucor mills have conducted Computational Fluid Dynamics (CFD) modeling on their exhaust systems and air pollution controls. Using CFD modeling information, we have implemented design changes in air handling systems and air pollution controls have reduced energy consumption and improved air quality.

We have undertaken many other process improvements and strategies reduce the amount of natural gas required to produce a ton of steel, including:

- Complete replacement of existing EAF oxygen injection and burner control trains;
- Process optimizations of natural gas firing schedules;
- Installation and maintenance of seals and insulation around EAF doors, roofs, and any openings around the burners or other equipment into the furnace shell;
- Utilization of oxy-fuel burners to optimize heat transfer, reduce heat losses, and reduce electrode consumption;
- Improved slag foaming practices to reduce radiant heat loss;
- Maintaining heat transfer efficiency of the ladles and tundishes through proper refractory lining and insulation.

Below follows a table illustrating the energy efficiency improvements observed at one of Nucor’s steel mills after installation of new natural gas combustion technologies.

Nucor Mill Energy (Natural Gas) Intensity Reduction Strategy					
	2015	2016	2017	2018	2019
Total natural gas use MMBTU per short ton finished steel, cast	1.47	1.41	1.32	1.25	1.27

CONCLUDING COMMENTS

At Nucor, we have always believed that one of our core responsibilities is to be a good steward of the environment, both locally, in the communities where we operate (and our teammates live), and globally. And we see this belief and the behavior it inspires across our approximately 26,000 teammates as continuing source of competitive advantage for our company. We expect to continue leading the way forward for the global steel industry in the years to come.