NUCOR:

THE PATH TO NET-ZERO

DAVE MIRACLE
GENERAL MANAGER OF ENVIRONMENTAL AFFAIRS
NUCOR CORPORATION

March 20, 2024

NUCOR®

OUR MISSION

OUR MISSION

GROW THE CORE
EXPAND BEYOND
LIVE OUR CULTURE

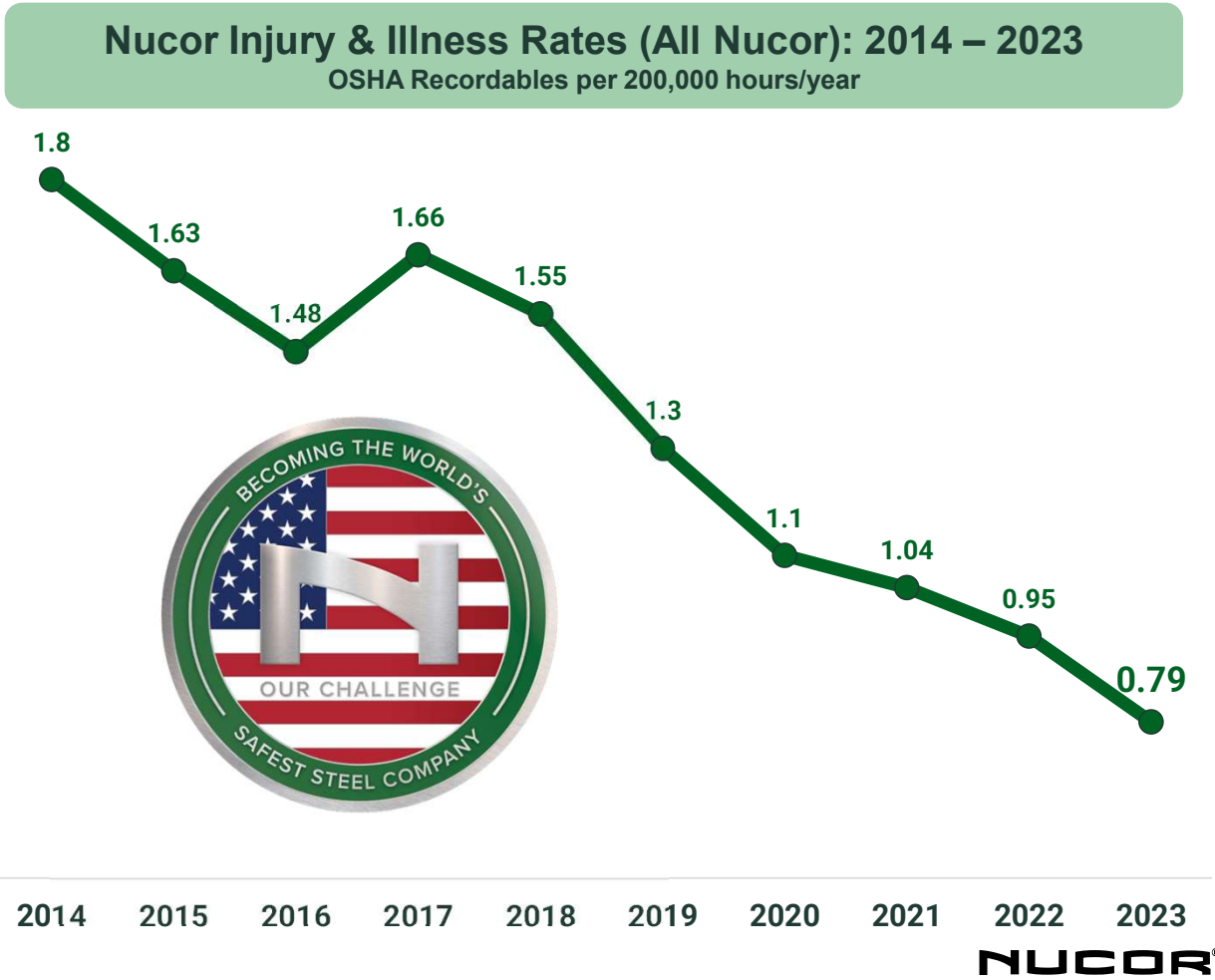
OUR CHALLENGE IS TO
BECOME THE WORLD'S SAFEST STEEL COMPANY.

WE LIVE EACH DAY WITH **GRATITUDE**
FOR THE FAMILIES, CUSTOMERS AND
PARTNERS THAT MAKE OUR WORK POSSIBLE.

NUCOR®

SAFETY – OUR #1 VALUE

2023 SAFEST YEAR IN COMPANY HISTORY



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NUCOR TODAY

26
STEEL MILLS

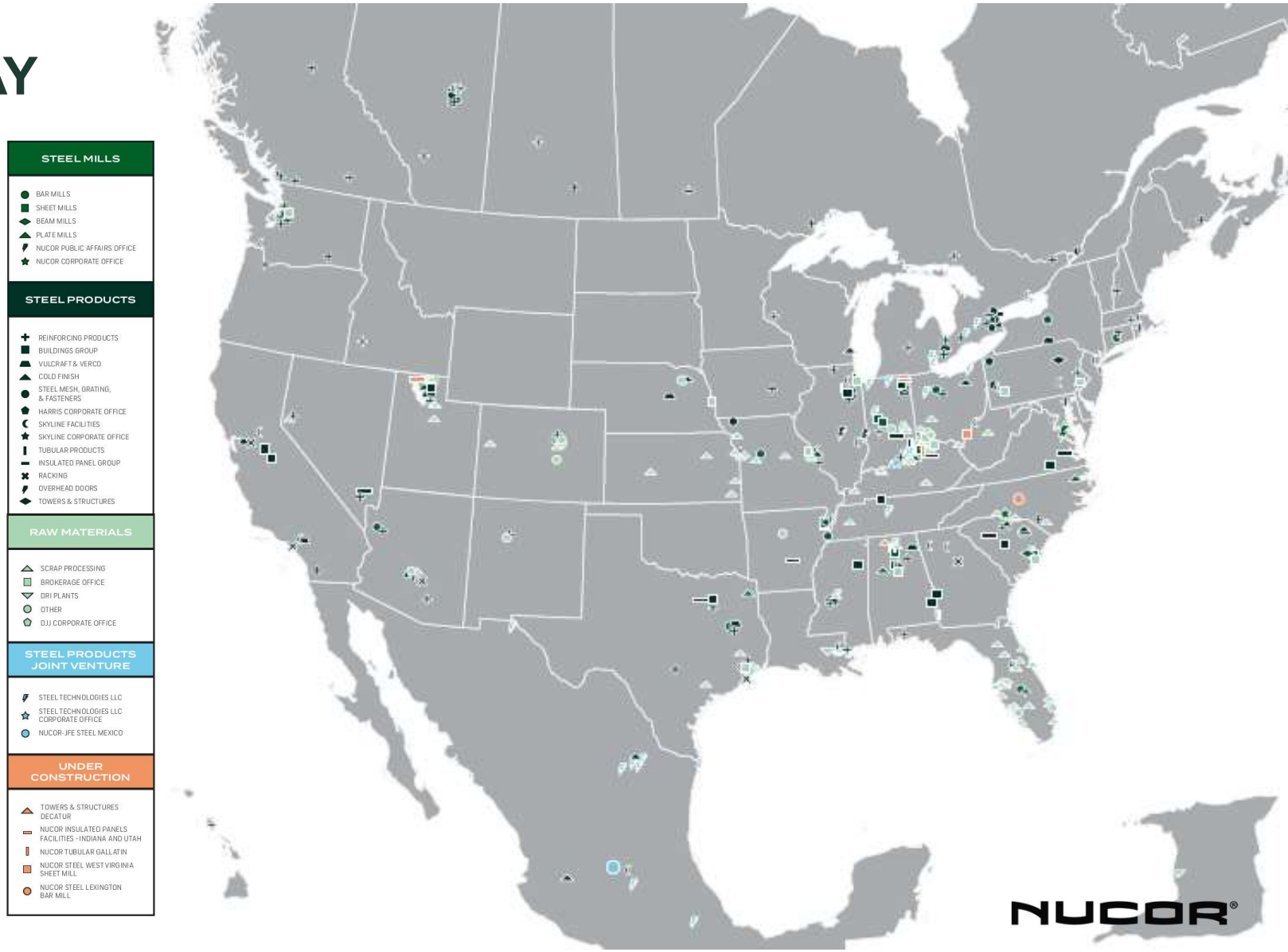
300+
TOTAL FACILITIES

20M+
TONS RECYCLED/YEAR

25.2M
TONS SHIPPED (2023)

32,000
TEAMMATES

$34.7B
NET SALES (2023)



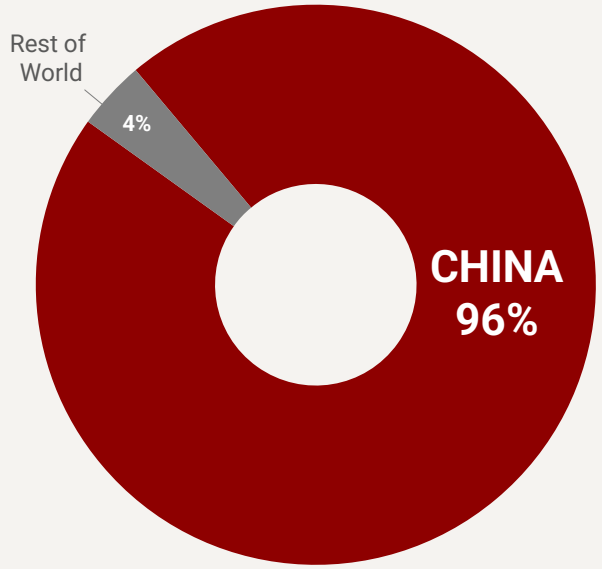
ATTRACTIVE GROWTH OPPORTUNITIES

STEEL INTENSIVE MEGA TRENDS	 **REBUILD**	 **REPOWER**	 **RESHORE**
NUCOR GROWTH OPPORTUNITIES	Aging U.S. Infrastructure Grid Modernization EVs Data Centers	Electrification Renewable Energy Decarbonization	Supply Chain Warehouses Nuclear Renaissance Automation AI Advanced Manufacturing
FEDERAL FUNDING PROGRAMS	**IIJA (Infrastructure)** $550B for transportation and infrastructure projects	**IRA (Clean Energy)** $370B in clean energy tax incentives	**CHIPS Act (Reshoring)** $55B to reshore U.S. manufacturing
INCREMENTAL STEEL DEMAND*	**3-5 Mtpa**	**2-3 Mtpa**	**0.5 Mtpa**

** Estimated incremental steel demand measured in million of tons per annum (Mtpa)*

CHINA'S COAL EXPLOSION

New Coal-Fired Power Facilities GLOBALLY
(*% of total plants constructed in 2023*)

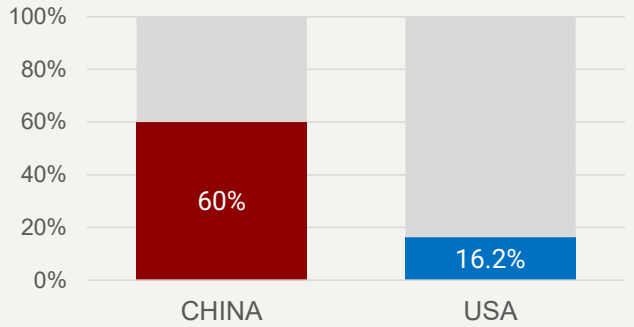


- In 2023, China added 47GW, the equivalent of ~¼ of the United States' entire coal-fired electric capacity

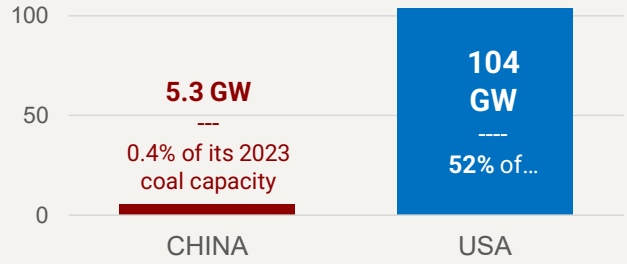
3,146 Coal-Fired Units in China*
Another 674 in various stages of development

*417 in USA

% Electric Generation from Coal-Fired Plants (2023)



Planned Coal Plant Retirements (GW) 2024-2024



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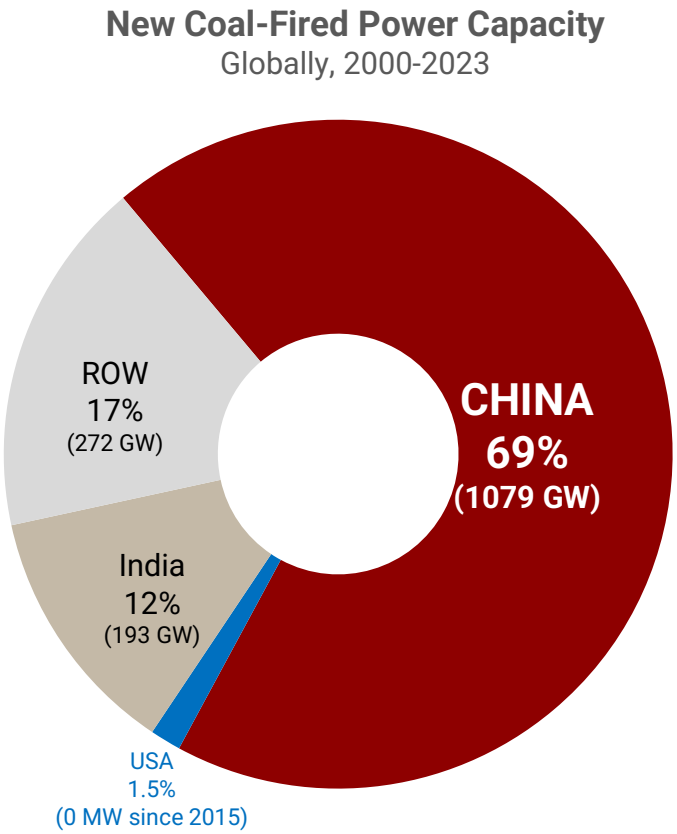

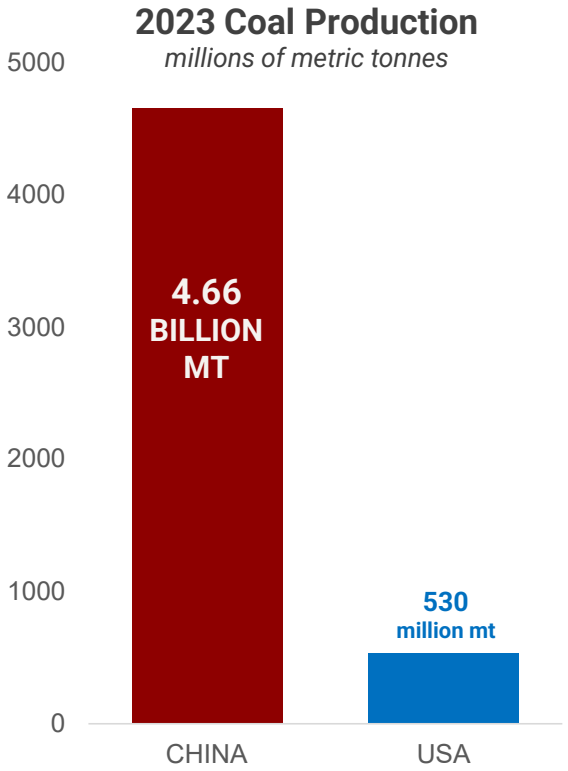

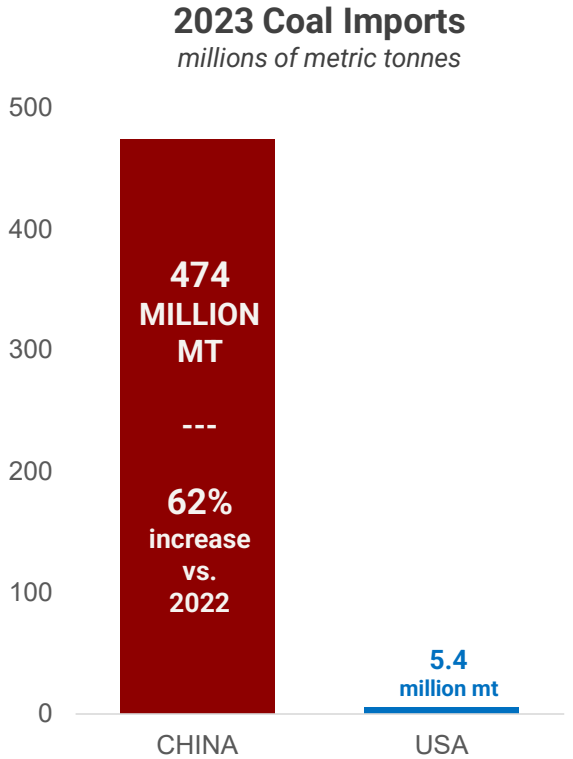

NUCOR IS MADE FOR GOOD

Made for Good is a campaign highlighting Nucor's leadership role in sustainable steel production and its work across industries to help customers achieve their sustainability goals

SUSTAINABILITY INITIATIVES – PAST 12 MONTHS	
SEP 2023	Investment in **Everett, WA based Helion Energy** to develop 500MW fusion plant
AUG 2023	Executed 250MW Sebree solar PPA with **NextEra Energy**
AUG 2023	Through GSCC, proposed a **Global Steel Standard** mandating science-based emission targets for steel manufacturers
JUN 2023	CCS Agreement with **ExxonMobil** to capture, transport and store up to 800,000 mt/yr. CO_2 from Nucor Louisiana DRI plant
MAY 2023	MOU with **Portland-based NuScale** to explore co-locating SMRs at Nucor mills
APR 2023	Announced effort to develop carbon emissions standard for global steel industry – **Global Steel Climate Council (GSCC)**
JAN 2023	Introduced **Elcyon™**, a sustainable high-strength steel plate for offshore wind monopile foundations
DEC 2022	Investment in **Electra** to develop carbon-free iron to make steel
NOV 2022	First major industrial company to join the **UN 24/7 Carbon-Free Energy Compact**

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LEADING THE TRANSITION TO 24/7 CLEAN ELECTRICITY

NUSCALE

- Nuclear power is one of the few sources of reliable, baseload carbon-free power necessary for industry
- Nucor invested in NuScale in 2022, and signed MOU in 2023 to support potential deployment of Small Nuclear Reactors (SMRs) to serve Nucor EAF mills
- We continue to study ways to support and help deploy fission in partnership with our utility partners and other industrial and large electricity users

HELION

- Nucor invested in Helion Energy in Sep 2023. Helion is working to develop the world's first nuclear fusion power plant
- Nucor's Energy Development Agreement with Helion calls for the development of a 500MW fusion power plant to serve a Nucor steelmaking facility with a target date of 2030
- Fusion has the potential to provide the cleanest electric power generation at scale and lead to a clean industrial future

NEXTera ENERGY

- Nucor recently announced our latest Power Purchase Agreement (PPA) for 250MW of renewable energy from the 400MW Sebree Solar project in Kentucky, being developed by a subsidiary of NextEra Energy Resources
- Nucor has been active in the PPA market, lending our A-credit ratings to new renewable energy projects to lower our Scope 2 emissions profile and accelerate the transition to 24/7 clean renewable based energy U.S. power grid

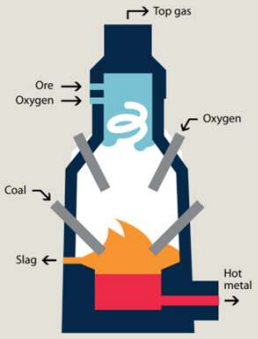
ALTERNATIVE IRONMAKING

electra
a clean iron company

- In Dec 2022, Nucor invested in Electra, a clean iron company pioneering a carbon-free process that uses electricity to convert low-grade iron ores into high-purity iron at temperatures no hotter than a cup of coffee
- Partnering with Electra provides an opportunity to lower our Scope 3 emissions long-term
- Electra's technology can use intermittent, renewable electricity to refine the iron units using an electrochemical and hydrometallurgical processes
- Electra's technology, if scalable, will allow us to recycle waste products and low-grade ore into high-concentration iron units, promoting circularity

HIsarna
HI (High Intensity) + Sarna (Celtic for 'Iron')

- Partnership with Tata Steel
- Produces iron without coke ovens
- Jointly operating pilot plant in the Netherlands to advance the technology
- Uses low grade ore fines
- CO_2 rich waste gas stream can be captured and sequestered
- High-value slag co-product for the cement industry
- Produces highest value-in-use iron product for EAFs
- **RESULTS IN NEAR ZERO GHG IRONMAKING**



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ENVIRONMENTAL PRODUCT DECLARATIONS

ON JANUARY 1, 2021

1 EPD for **1 Product** covering **1 Facility**

MARCH 2024

19 EPDs for **9 Products** covering **54 Facilities**


ENVIRONMENTAL PRODUCT DECLARATION

FABRICATED CONSTRUCTION GRADE STEEL PLATE

NUCOR STEEL TUSCALOOSA, INC.

NUCOR TUSCALOOSA

Nucor Steel Tuscaloosa manufactures a wide range of steel products in cut-to-length and discrete plates. These plates are used in a wide range of applications, including rail, marine, wind turbines, high mast utility poles and transmission towers, bridges, pipe and tube, construction and mining equipment, infrastructure, and storage tanks. Today, Nucor Steel Tuscaloosa has the capacity to produce and market approximately 1,200,000 tons of steel plate each year.

Nucor is North America's largest steel producer and recycler, turning approximately 20 million net tons of scrap steel in 2022 into new steel. Nucor uses Electric Arc Furnace (EAF) technology at each of its steel recycling facilities. Unlike traditional blast furnace steelmaking, which produces more than 70% of the world's steel using mined iron ore and metallurgical coal as feedstock, EAFs use post-consumer scrap as their major feedstock.

Through its use of EAFs, Nucor's steelmaking CO_2 emissions are less than one-third of the global average on a per ton basis, and Nucor's energy intensity is approximately one-quarter the global average.

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION

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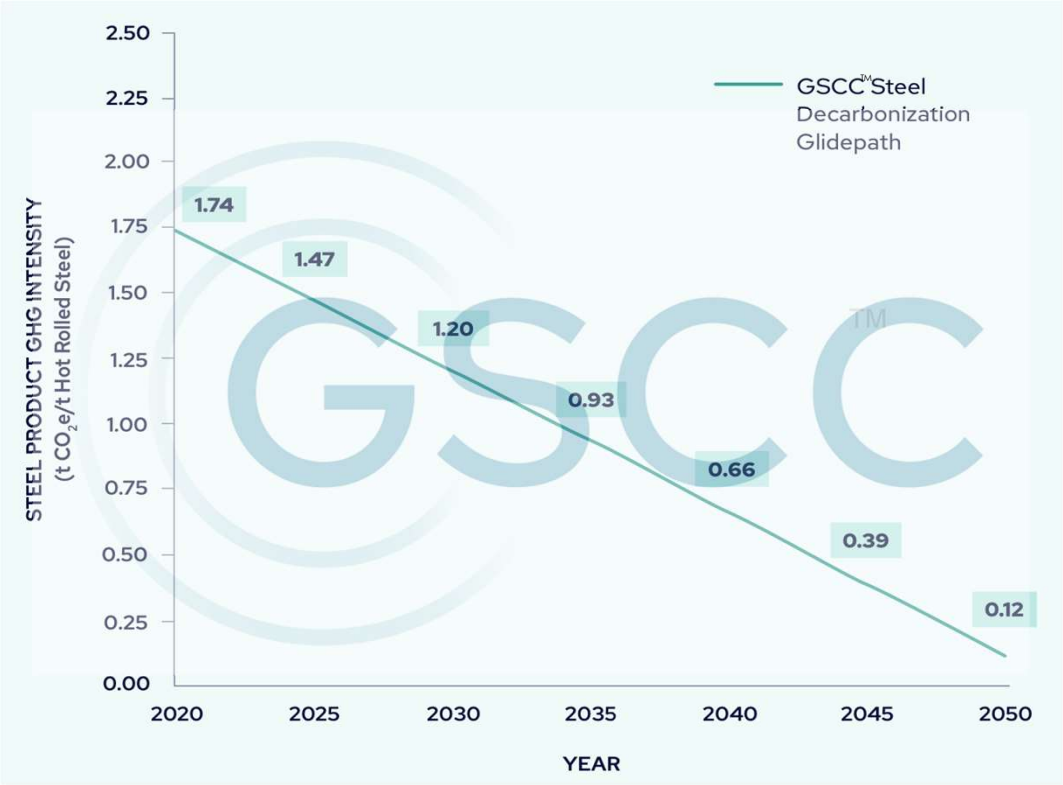
GSSC™: Steel Sector Decarbonization Glidepath

Adapted from *IEA Net-Zero by 2050* Roadmap.

Expanded boundary results in more ambitious pathway to 2050.



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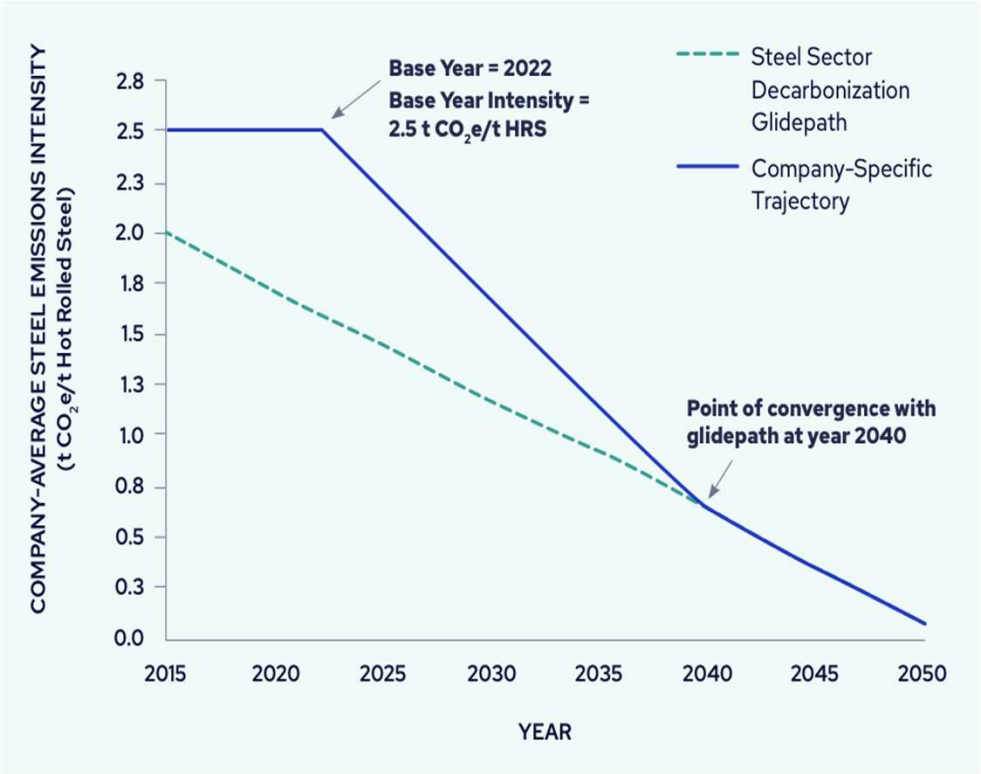
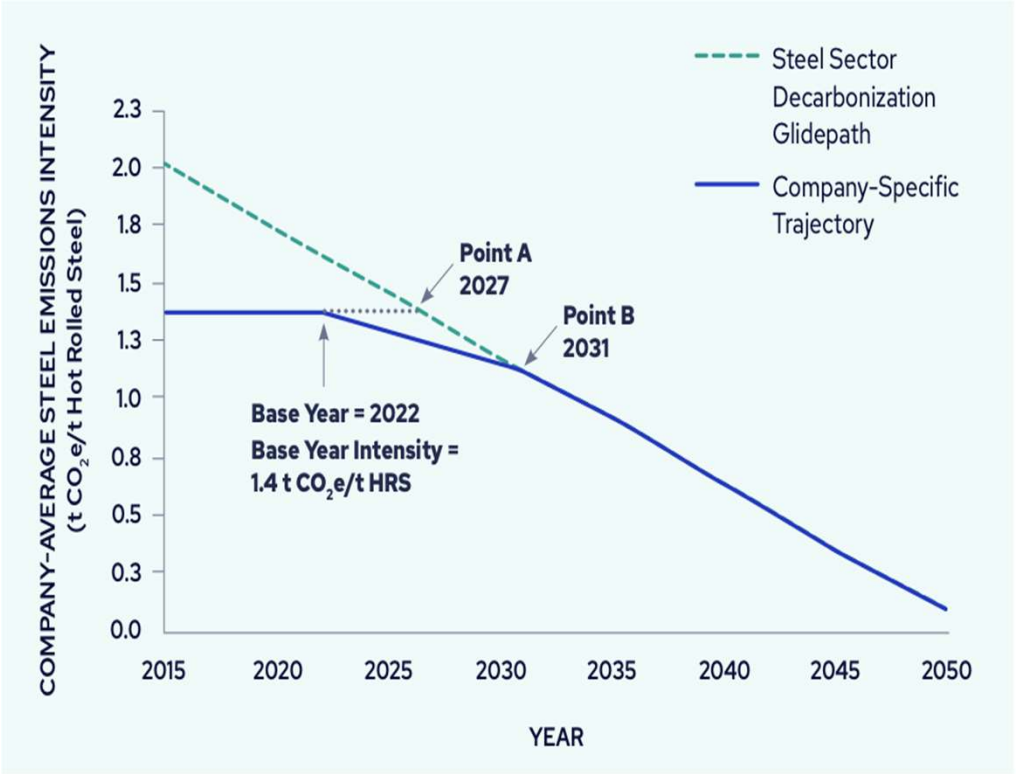
GSSC : ESTABLISHING COMPANY-SPECIFIC TRAJECTORY





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COMPARING WITH OTHERS

Program Element	world steel	IEA	SBTi	Responsible Steel	GSCC
Program Type	Data Collection & Benchmarking	1.5°C Roadmap	Target Setting Framework	Facility & Product Standard	Product Standard & Target Setting Framework
Corporate Science-Based Target Setting Framework	No	No	Yes	No	**YES**
Green Steel Product Standard(s)	No	No	No	Yes	**YES**
Boundary Includes Emissions Downstream of Caster	No	No	Yes	No	**YES**
Accounts for Scrap Collection & Sorting	No	No	No	Yes	**YES**
Covers all Relevant GHGs (CO_2e)	No	No	Yes	Yes	**YES**
Sets a Common Standard for All Steel-Making Technologies (no “sliding scale”)	No	No	No	No	**YES**
Focuses on Achievement of Low-GHG Intensity Goal	No	Yes	Yes	Yes	**YES**
Requires Commitment to Corporate Science-Based Targets	No	No	Yes	Yes	**YES**
Requires 3rd Party Verification	WSA verifies	No	No	Yes	**YES**

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EUROPE AND OTHERS ARE RAPIDLY REPLACING BF-BOF WITH EAF/DRI

Company	Investment Size ($USD)	Capacity (MT/year)	Date Online
Algoma (Canada)	$520 million	3.7 million	2024
ArcelorMittal (Canada)	$1.31 billion	2.4 million	2028
ArcelorMittal (Belgium)	$1.3 billion	2.5 million	2030
ArcelorMittal (France)	$1.95 billion	2.5 million	2027
ArcelorMittal (Germany)	$1.6 billion	3.5 million	2025
ArcelorMittal (Spain)	$1.1 billion	1.1 million	2025
Blastr (Finland)	$4.24 billion	2.5 million	2026
British Steel (UK)	$1.6 billion	—	2025
H2 Green Steel (Spain)	$2.5 billion	2 million	2025-2026
H2 Green Steel (Sweden)	>$5 billion	5 million	2025

Company	Investment Size ($USD)	Capacity (MT/year)	Date Online
Liberty Steel (Romania)	$1 billion	1 million	2030
Saarstahl (Germany)	$3.67 billion	3.5 million	2027
Salzgitter (Germany)	>$2 billion	1.9 million	2025
SSAB (Finland)	$4.75 billion	2.6 million	2030
SSAB (Sweden)	$4.75 billion	2.7 million	2026
Tata Steel (Netherlands)	>$400 million	2.5 million	2030
Tata Steel (UK)	$1.55 billion	—	—
Thyssenkrupp (Germany)	>$3 billion	2.5 million	2026
Voestalpine (Austria)	$1.6 billion	2.5 million	2027

HIGH-EMITTING BF-BOFS ADMIT THAT EAFS PRODUCE THE SAME TYPES AND GRADES

Transition to DRI-EAF steelmaking set to reduce carbon emissions at ArcelorMittal Dofasco in Canada by 3 million tonnes and remove coal from the Company's North American flat steel franchise

This project contributes to the sustainability of well-paying skilled positions in advanced manufacturing and is also expected to support as many as 2,500 jobs during the engineering and construction phases. It will also support ArcelorMittal Dofasco's customers decarbonisation ambitions while further enhancing ArcelorMittal Dofasco's capability to support the most demanding product segments including automotive exposed, advanced high strength steels, and consumer packing.

ArcelorMittal, *ArcelorMittal breaks ground on first transformational low-carbon emissions steelmaking project* (Oct. 15, 2022)

Driving down embedded CO_2 in existing automotive steel

"SSAB is making other major investments – concurrent with our HYBRIT investments – in converting our existing blast furnaces from using carbon to electric arc furnaces," notes Hörnfeldt. "Under normal circumstances, our blast furnace in Oxelösund must be rebuilt in 2025. Rather than pay the vast amount of money it costs for a rebuild, we thought, why not replace it with an electric arc furnace instead? The electric arc furnace can be fed scrap steel until the HYBRIT plant produces its own 'sponge iron' feedstock for our steel production."

SSAB, *Fossil-free steel production* (last accessed Feb. 12, 2024)

Tenova will supply an **Electric Arc Furnace** (EAF) equipped with **Consteel®** and **Electromagnetic Stirrer Consteerrer®** to **POSCO** for its **Gwangyang plant** in **South Korea**. The South Korean steelmaker, the sixth largest worldwide with about 43Mt of steel produced in 2022, has a **track record of pursuing the decarbonization** of its high-quality steel products, which mostly include grades traditionally produced via the integral cycle only, such as interstitial-free grades for the automotive industries and the much-coveted electric steel grades required, for instance, by all providers of electrical mobility and green power generation solutions.

Tenova, *Tenova for POSCO Gwangyang plant* (June 7, 2023)

Product ranges are determined by finishing facilities, not EAF or BF-BOF

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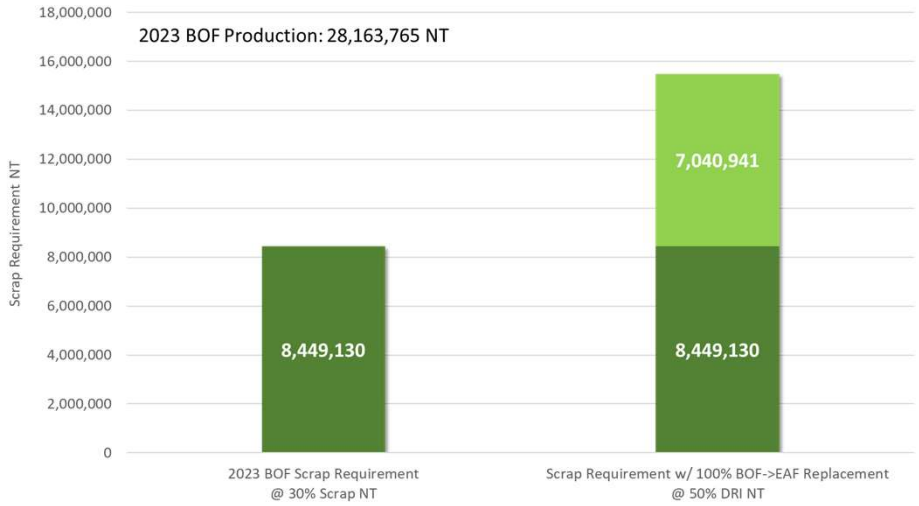
SCRAP AVAILABILITY DOES NOT LIMIT EAF/DRI FLAT PRODUCTION IN THE US

- **There is sufficient scrap supply to support increased EAF production**
- Scrap is a globally traded commodity, and the US exports about 18 million tons annually due to lack of domestic demand
- Scrap is price elastic: demand increases, prices rise, and collection is incentivized
- Investments in sorting and processing allow use of low-copper shred scrap for sheet
- Use of DRI and low-copper shred shows that prime scrap is not a limitation for EAFs



Only about 7 million tons of scrap would be required for all existing BF-BOFs to transition to EAF/DRI in the US

As noted steel expert Marcel Genet (President of Laplace Conseil) commented recently:

"{T}he problem of making automotive sheet in an EAF is not scrap or residues. It's investment in making high-quality steel. You need to have a tip-top, consistent hot strip mill."

Eurometal, *Scrap is the future of steel* (Feb. 13, 2024)

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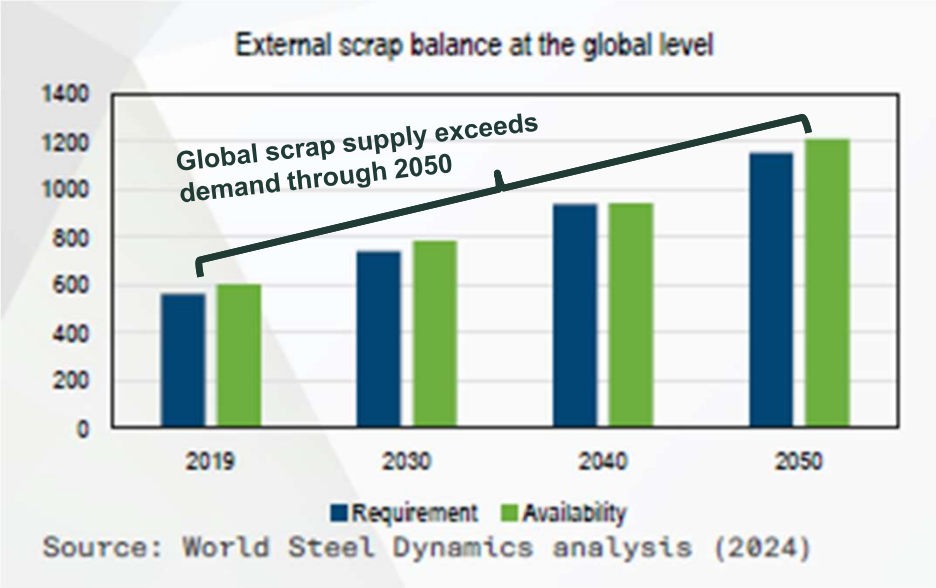
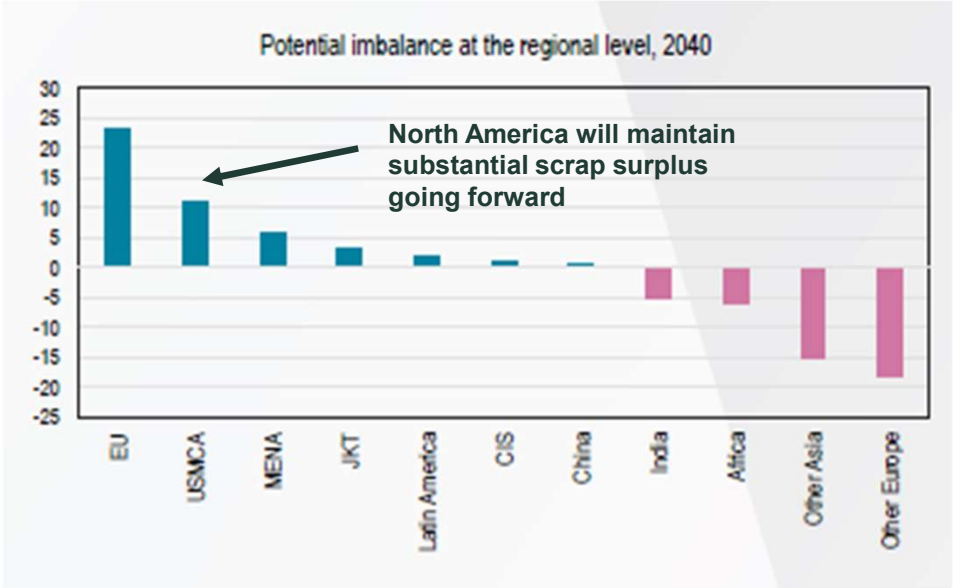
OECD RECENTLY CONCLUDED THERE IS SUFFICIENT SCRAP SUPPLY IN THE US AND GLOBALLY





Gianpiero Mattera, OECD Steel Supply China Observatory, *Access to raw materials for steel: critical challenges for a competitive global steel industry* (Feb. 8, 2024)

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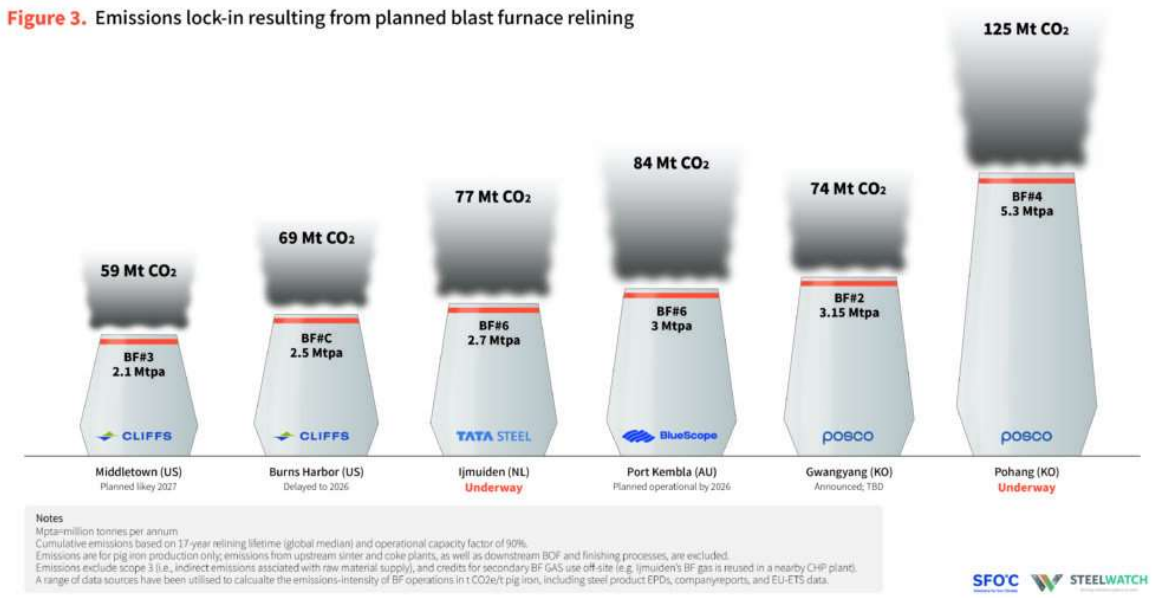
PROTECTING OLD BF-BOFS IS NOT AN EXCUSE TO AVOID DECARBONIZING

- Many of the largest U.S. BF-BOF producers have recently or will be relining their blast furnaces
- Relining blast furnaces extends the useful life of these investments another 17 years on average
- **The financial costs of abandoning blast furnaces explains the hesitancy of integrated producers to decarbonize**



SteelWatch, *Redline not reline: 4 leading steel companies in OECD set to lock in almost half a billion tonnes of CO2* (Oct. 17, 2023)

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SUPPORTING WORKERS IS NOT AN EXCUSE TO AVOID DECARBONIZING

- The shift from BF-BOF to EAF/DRI will impact certain regions and workers differently
  - U.S. Steel Mon Valley and Big River each produce 3 million tons annually, except the EAF mill employs 1/3 the workers
- Supporting workers does not justify preserving high emissions blast furnaces
- Worker transition programs that are distinct from emissions policies are the answer
- In the long-run, EAF/DRI steelmaking will support more high paying U.S. manufacturing jobs than BF-BOF

The $1.5 billion investment, which U.S. Steel unveiled in May 2019, would have preserved 3,000 steel jobs and created 1,000 construction jobs while also cutting carbon emissions. U.S. Steel announced Friday that it would instead move production

An-Li Herring, WESA, *Toomey 'Perplexed' By U.S. Steel's Cancellation of $1.5B Mon Valley Works Upgrade*

"First, although DRI-EAF supports fewer direct iron and steelmaking jobs (779) than present (895), the green steelmaking pathway will actually support more jobs overall than traditional BF-BOF steelmaking by 2031 (620)."

Ohio River Valley Institute, *Green Steel in the Ohio River Valley* (Apr. 2023) at 36

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CHINA'S COAL EXPLOSION

"China's actions. . .reflect the understanding that despite the global commitments the expansion of the coal sector is inevitable and tacitly accepted by the international community" –*POWER magazine*

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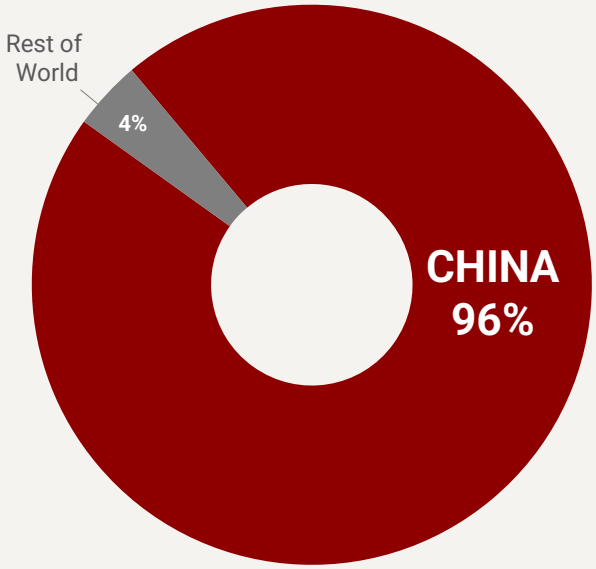

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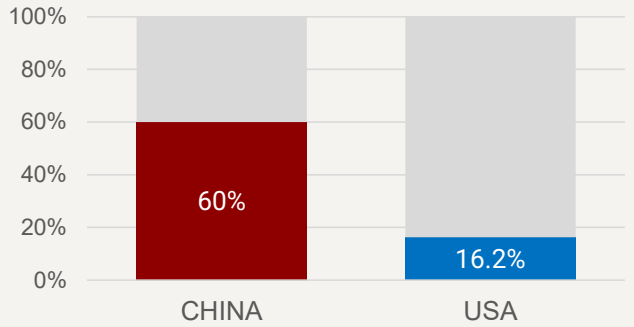

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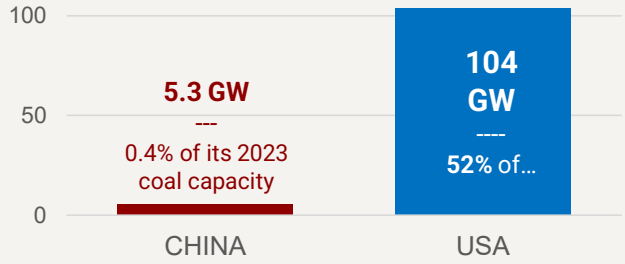

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Biographical Information

Dave Miracle is the General Manager of Environmental Affairs for Nucor Corporation. In his role, Dave works to further Nucor's leadership as one of the cleanest, most sustainable steelmakers in the world.

Dave joined Nucor in August 2020 as Manager of Environmental Affairs, was promoted to Director of Environmental Sustainability in the January 2023 and then in July 2023 was promoted to his current position of General Manager of Environmental Affairs.

Dave began his career at AK Steel in 1998 and served in various environmental positions over his 22-year tenure, including General Manager of Environmental Affairs and Sustainability prior to joining Nucor.

In 2019, Dave was appointed by the President of the United States as federal commissioner of the Ohio River Valley Water Sanitation Commission (ORSANCO). He also previously served as a steering committee member for AK Tube LLC, and as Chairman of the Environmental Committee at the American Iron and Steel Institute.

Dave holds a Bachelor of Science Degree in Civil Engineering from the University of Kentucky.