

**NUCOR CORPORATION**

# **NET-ZERO BY 2050 STRATEGY**

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**NUCOR<sup>®</sup>**

# FORWARD-LOOKING STATEMENTS

Certain statements made in this presentation may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties. The words “anticipate,” “believe,” “expect,” “intend,” “may,” “project,” “will,” “should,” “could” and similar expressions are intended to identify forward-looking statements. These forward-looking statements reflect the Company’s best judgment based on current information, and although we base these statements on circumstances that we believe to be reasonable when made, there can be no assurance that future events will not affect the accuracy of such forward-looking information. The Company does not undertake any obligation to update these statements. The forward-looking statements are not guarantees of future performance, and actual results may vary materially from the projected results and expectations discussed in this presentation. Factors that might cause the Company’s actual results to differ materially from those anticipated in forward-looking statements include, but are not limited to: (1) competitive pressure on sales and pricing, including pressure from imports and substitute materials; (2) U.S. and foreign trade policies affecting steel imports or exports; (3) the sensitivity of the results of our operations to general market conditions, and in particular, prevailing market steel prices and changes in the supply and cost of raw materials, including pig iron, iron ore and scrap steel; (4) the availability and cost of electricity and natural gas, which could negatively affect our cost of steel production or result in a delay or cancellation of existing or future drilling within our natural gas drilling programs; (5) critical equipment failures and business interruptions; (6) market demand for steel products, which, in the case of many of our products, is driven by the level of nonresidential construction activity in the United States; (7) impairment in the recorded value of inventory, equity investments, fixed assets, goodwill or other long-lived assets; (8) uncertainties and volatility surrounding the global economy, including excess world capacity for steel production, inflation and interest rate changes; (9) fluctuations in currency conversion rates; (10) significant changes in laws or government regulations affecting environmental compliance, including legislation and regulations that result in greater regulation of greenhouse gas emissions that could increase our energy costs, capital expenditures and operating costs or cause one or more of our permits to be revoked or make it more difficult to obtain permit modifications; (11) the cyclical nature of the steel industry; (12) capital investments and their impact on our performance; (13) our safety performance; (14) our ability to integrate businesses we acquire; (15) the impact of the COVID-19 pandemic, any variants of the virus, and any other similar public health situation; and (16) the risks discussed in “Item 1A. Risk Factors” of the Company’s Annual Report on Form 10-K for the year ended December 31, 2022 and elsewhere therein and in the other reports we file with the U.S. Securities and Exchange Commission.

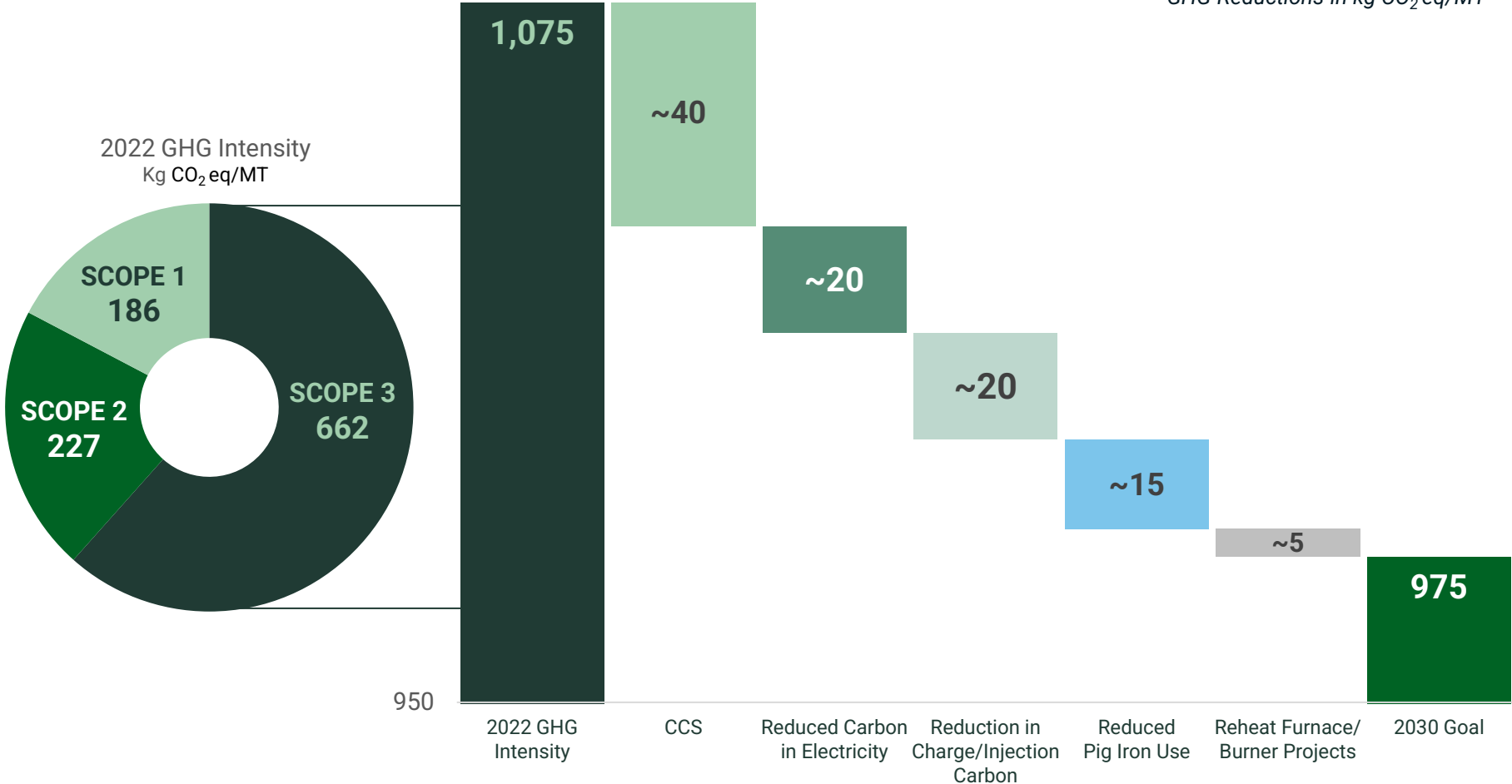
# NUCOR'S GREENHOUSE GAS (GHG) REDUCTION TARGETS

- Nucor is the North American leader in sustainable steelmaking
- We are committed to a net-zero 2050 science-based GHG target as defined by the Global Steel Climate Council's (GSCC) "Steel Climate Standard", an ambitious standard consistent with the International Energy Agency Net Zero by 2050: A Roadmap for the Global Energy System glidepath for the industry (IEA NZE)
- Our net-zero 2050 target will result in a GHG intensity of 116 kg GHGs per metric ton of steel, including Scopes 1, 2 and 3 emissions as defined by GSCC
- Our interim 2030 science-based GHG reduction target is 975 kg GHGs per metric ton of steel, including Scopes 1, 2 and 3 emissions as defined by GSCC
- We will continue to be an industry leader in GHG transparency. Our reporting will continue to be third-party verified. We will share our plans and the actions needed to achieve our goals

# 2030 GHG REDUCTION STRATEGY

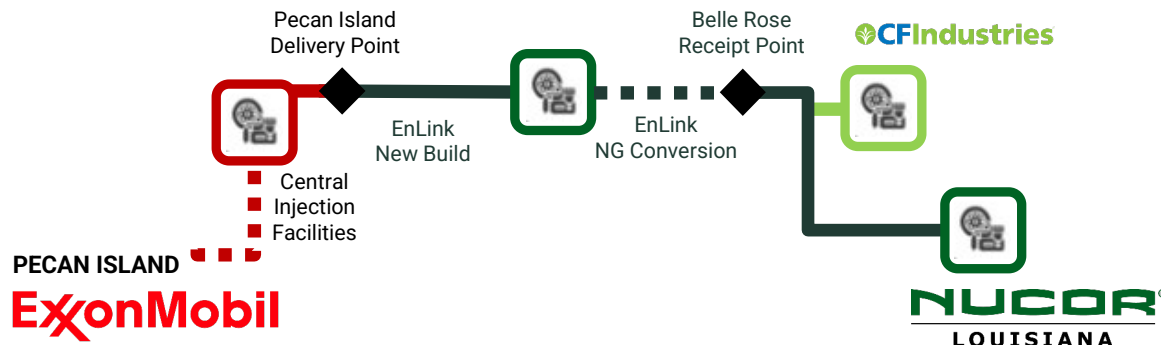
Science-based short-term goal of **975 kg CO<sub>2</sub> eq/MT** by 2030

*GHG Reductions in kg CO<sub>2</sub> eq/MT*



# CARBON CAPTURE & STORAGE (CCS) PROJECT

- Nucor's Louisiana facility (NSLA) currently produces DRI with ~50% the carbon footprint compared to iron produced in blast furnaces at integrated steel mills
- CCS agreement with ExxonMobil announced in June 2023
- ExxonMobil to capture 600-800 kt/yr CO<sub>2</sub> from NS-LA for permanent storage
- Transformative project will result in Nucor DRI having ~80% lower carbon footprint compared to blast furnaces
- Capital-light project for Nucor with substantial impact on its steelmaking GHG footprint
- Expected start-up in 2026



# SCOPE 3 EMISSIONS REDUCTION STRATEGY

## CLEANER SCRAP & SCRAP SUBSTITUTES

### GREEN PIG IRON

- Green pig iron can be produced from charcoal made from sustainably grown eucalyptus in lieu of coal
- The carbon value of green pig is less than half of coal-based pig iron
- Reduces coal-based pig iron need, lowering Scope 3 GHGs



### LOW COPPER SHRED

- Advanced separation technologies yielding higher grade obsolete scrap
  - Produce higher quality metalics, especially for sheet mills
  - Capable of significant reductions in copper content (~30%)
- Commissioning technology in order to increase scrap utilization
- Reduces need for carbon-intensive ore-based metalics, driving down Scope 3 GHGs



# LEADING THE TRANSITION TO 24/7 CLEAN ELECTRICITY



- 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



- 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



- 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

# PATHWAY TO NET-ZERO BY 2050

<b>LOW CARBON ELECTRICITY</b>	<ul style="list-style-type: none"><li>• Nucor will continue to reduce its consumption of electricity generated with fossil fuels</li><li>• Through utility partnerships, the promotion of renewables, the exploration of nuclear energy alternatives and power purchase agreements we will reduce embodied carbon associated with our purchased electricity</li></ul>
<b>NEAR ZERO GHG IRONMAKING</b>	<ul style="list-style-type: none"><li>• Nucor utilizes virgin iron at some of its steel mills including DRI produced at two of our locations</li><li>• We will utilize carbon sequestration to reduce DRI embodied carbon at our plant in Louisiana</li><li>• We are also actively investing in the development of near zero ironmaking technologies, including Electra and Hisarna. Hisarna, when combined with carbon sequestration results in near zero GHG emissions</li><li>• We are also implementing projects such as low copper shred, which allows us to use fewer virgin iron units</li></ul>
<b>REPLACEMENT OF CHARGE &amp; INJECTION CARBON AND NATURAL GAS</b>	<ul style="list-style-type: none"><li>• Nucor is working on technologies to reduce our consumption of injection and charge carbon</li><li>• We are actively exploring the use of biofuel substitutes</li><li>• We are pursuing a series of projects that will reduce natural gas usage and replace process gas with low carbon or zero-carbon technologies</li></ul>



# ALTERNATIVE IRONMAKING



- 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

## Hlsarna

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<sub>2</sub> 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**

