

# SPEARHEADING SUSTAINABILITY

A STEELY RESOLVE IN THE STEEL MARKET.

## NUCOR SUSTAINABILITY BENCHMARKS



Safest year on record for Nucor



Pioneering the circular economy of steel



Introduced the world's first net-zero carbon steel, Econiq™



100% of our steel produced in Electric Arc Furnaces\*



Steel industry leader with a GHG intensity less than 30% of the industry global average.



0.43 metric tons of CO<sub>2</sub>e per metric ton of steel produced\*



100% water recycled in our operations



The largest buyer of renewable energy in the steel sector



Average recycled content 77.3% recycled steel

\*Exception is imported stainless steel

"FOR MORE THAN FIVE DECADES, NUCOR HAS BEEN BUILT ON THE SUSTAINABLE MODEL OF PRODUCING STEEL WITH A LOW CARBON FOOTPRINT BY RECYCLING SCRAP METAL INTO NEW STEEL AND STEEL PRODUCTS. AS THE FIRST MAJOR INDUSTRIAL COMPANY IN THE WORLD TO JOIN THE COMPACT, WE WILL BUILD ON THIS LEGACY BY TAKING A LEADERSHIP ROLE IN THE WORLD'S TRANSITION TO 24/7 CLEAN ENERGY."

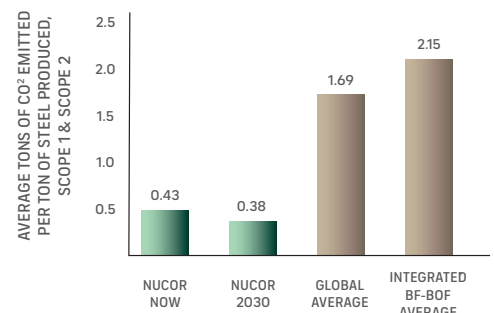
-LEON TOPALIAN, CEO

## LEADING THE MARKET IN CARBON REDUCTION

Nucor was the first major industrial company to join the United Nations 24/7 Carbon-Free Energy Global Compact. This compact is aimed at accelerating the decarbonization of the world's electricity systems to mitigate climate change and ensure access to clean and affordable electricity.

To further its commitment, Nucor is working with its electricity suppliers to access 24/7 clean energy at the company's steel mills. It is actively investing in a number of innovative projects that it believes will accelerate the transition to 24/7 clean energy. For example, in April 2022, Nucor announced a strategic investment in NuScale Power Corporation, a developer of small modular reactor nuclear plants. Nucor believes this technology presents an incredible opportunity to develop a safe, modern, zero-carbon nuclear energy future.

We are also a founding member of The Global Steel Climate Council Inc. (GSCC), which is a nonprofit association focused on reducing greenhouse gas emissions from the global steel industry. Nucor was the architect and driving force behind this organization. The Council is made up of 25 global producer companies and several trade associations who are aligned with the objectives of the GSCC. The GSCC is advocating for a single global standard that accelerates the transition to low-emission steel and recognizes the critical role that recycled/EAF steelmaking plays in reducing carbon emissions.



\*Integrated includes: Cliffs, U.S. Steel N.A. SDI and CMC

## RECYCLABILITY

Nucor's insulated metal panel, IMP, products contribute in multiple ways to help us leave a positive impact on our environment.

Our steel is 100% recyclable at the end of its useful life and is made up of 65.25% recycled ferrous scrap metal.

Insulated cores, PIR, produces no ozone-depleting gas and help make buildings highly energy efficient, reducing reliance on fossil fuels for heating and cooling. IMPs have contributed to a post redesign fossil fuel usage decrease of 30%.

IMPs have a lower embodied carbon footprint than other common wall materials, such as concrete

and brick. Additionally, these other wall constructions require added insulating materials for them to achieve equivalent thermal values as with IMPs.

Plus, the high R-values of Nucor IMPs support towards credits in the Leadership in Energy and Environmental Design (LEED) Green Building rating system. (See back page for QR code to 54 Middlesex Project Video.)



## NUCOR SUSTAINABILITY GOALS

From an Advantaged Starting-Point We Set Ambitious Goals:

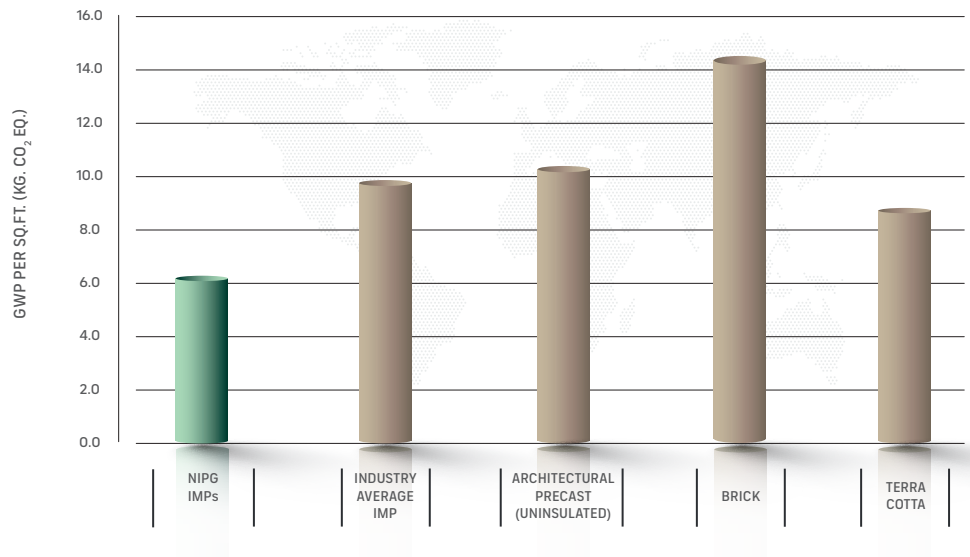
1. Nucor is committed to an additional 35% combined reduction in our Scope 1 and Scope 2 GHG Intensity by 2030 (2015 baseline).
2. Nucor values transparency and will continue to publicly disclose and reduce our Scope 1, Scope 2, and our most significant Scope 3 GHG emissions.
3. Beyond 2030, Nucor is committed to reducing our GHG emissions with the ambition of net zero emission steel to meet the demands of the green economy.

## EMBODIED CARBON CONTENT

Environmental Product Declarations (EPDs) are generated based upon the amount of carbon dioxide released during the creation of a product. EPDs look at the total product Life Cycle Analysis (LCA) which includes contributions of upstream processes like raw material extraction, through manufacturing and packaging, up to shipping and transportation of the final manufactured product. This is a key factor when selecting a building material by reviewing their holistic impacts on the environment.

The chart below presents the equivalent carbon content per square foot of installed wall based on published EPDs by various trades. All values represent the cradle-to-gate stages of the LCA.

## GLOBAL WARMING POTENTIAL PER SQUARE FOOT OF WALL

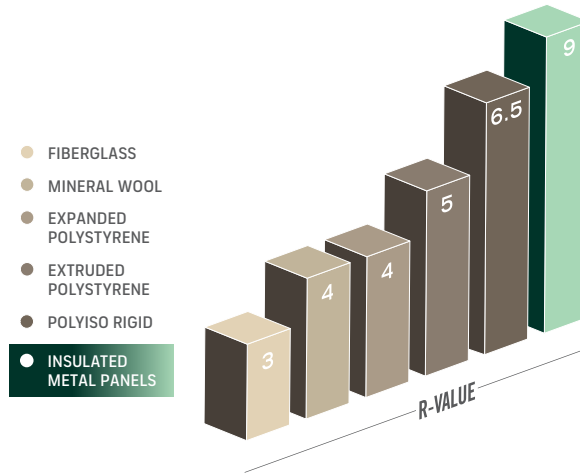


# BUILDING EFFICIENCY

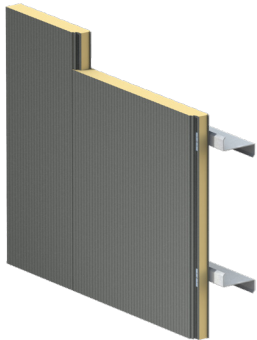
NUCOR IMPs ACHIEVE GREATER INSULATION R-VALUES PER INCH THAN OTHER COMMON WALL SYSTEMS

Building efficiency must be considered as improving the performance of a complex system designed to provide occupants with a comfortable, safe and attractive living and working environment. The building sector accounts for 76% of electricity use and 40% of all U.S. primary energy use and associated greenhouse gas (GHG) emissions, making it essential to reduce energy consumption. Opportunities for improved efficiency are enormous.

1. Thermal Values - IMPs can achieve a staggering per inch R-value as high as 9 and U-factor as low as 0.014. With these robust insulating values, IMPs are so effective with meeting energy codes across all climate zones.



2. All-in-One Solution  
IMPs create the perfect building envelope in one easy step, covering all necessary barriers, compared to traditional multi-component built up systems.

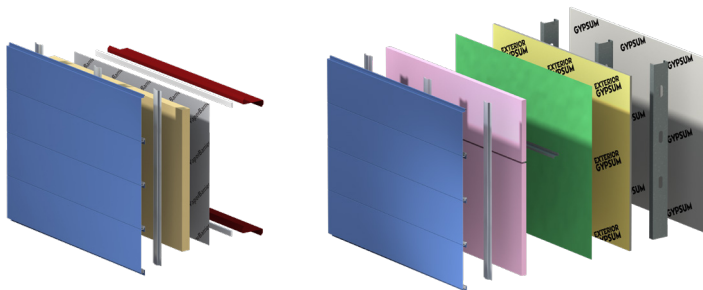


### INSULATED METAL WALL PANEL

- Double joint system provides redundancy against leakage.
- Rigid, continuous insulation, no loss of R-value due to compression.
- Meets or exceeds energy code requirements in ALL climate zones.
- FM 4880 Class 1 approved. Suitable for use in combustible and non-combustible construction per IBC chapter 26.

### MULTI-COMPONENT WALLS

- Increases wall design complexity.
- Multiple components lead to multiple trades, which lead to increased labor cost and risk.
- Barrier wall design may vary with climate zone.



3. Labor Reduction - IMPs can be erected at a rate of up to 5,000 sq ft per 8-hour shift using a 4-man crew. Additionally, the all-in-one barriers reduces the number of installation trades required saving scheduling headaches.

These advantages make using IMPs perfect for any projects and translate into significant cost savings.



“A SUSTAINABILITY MOVEMENT IS EXPANDING AROUND THE WORLD LIKE WE HAVE NEVER SEEN BEFORE, AND AS ONE OF THE LARGEST RECYCLERS ON THE PLANET, NUCOR IS IN A POSITION OF STRENGTH TO SET THE BAR FOR THE REST OF THE WORLD.”

-LEON TOPALIAN, CEO



## RECYCLED CONTENT

Recycling is a circulative affect with pre- and post-consumer impacts. Using recycled content is an essential step in a successful recycling system and in turn, manufacturing a product that can be recycled helps feed into the on-going circulative effect.

IMP PRODUCT COMPONENT	PRE-CONSUMER RECYCLED CONTENT	POST-CONSUMER RECYCLED CONTENT	TOTAL RECYCLED CONTENT
FOAM (RECYCLED PLASTICS)	5.0%	4.5%	9.5%
SCRAP STEEL	35.1%	25.5%	60.6%



## NUCOR IMPS ACHIEVE GREATER INSULATION R-VALUES PER INCH THAN OTHER COMMON WALL SYSTEMS

## RESILIENCE

IMPs withstand the impacts of natural disasters that others can not. The strong dual skins protect people and property from airborne debris common with high winds and hail. The lightweight panels are engineered to accommodate for building movement, staying in place during seismic events. Plus IMPs systems pass NFPA 285-2019 and come with mineral wool cores to provide one- to three-hour fire ratings.



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