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Forging the Future:

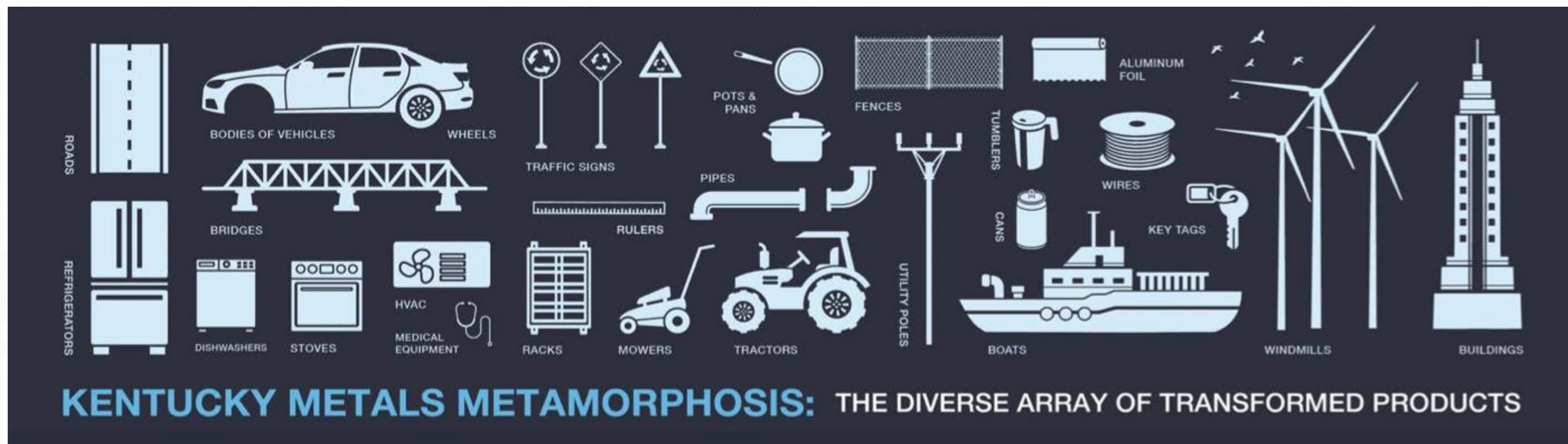
**Kentucky's National Leadership in
Metals Manufacturing**

August 28, 2025



KY Metals Industry

- Comprised of some of the largest steel, stainless steel, aluminum, copper companies in the world
- Provides materials for automotive, appliances, packaging of all types, wiring, cables, buildings, bridges, oil & gas, power lines, etc.
- Located in every region of KY
- One of the largest economic sectors in the state, with unparalleled recent investment
- Aligned with federal administration's direction to increase fundamental U.S. manufacturing

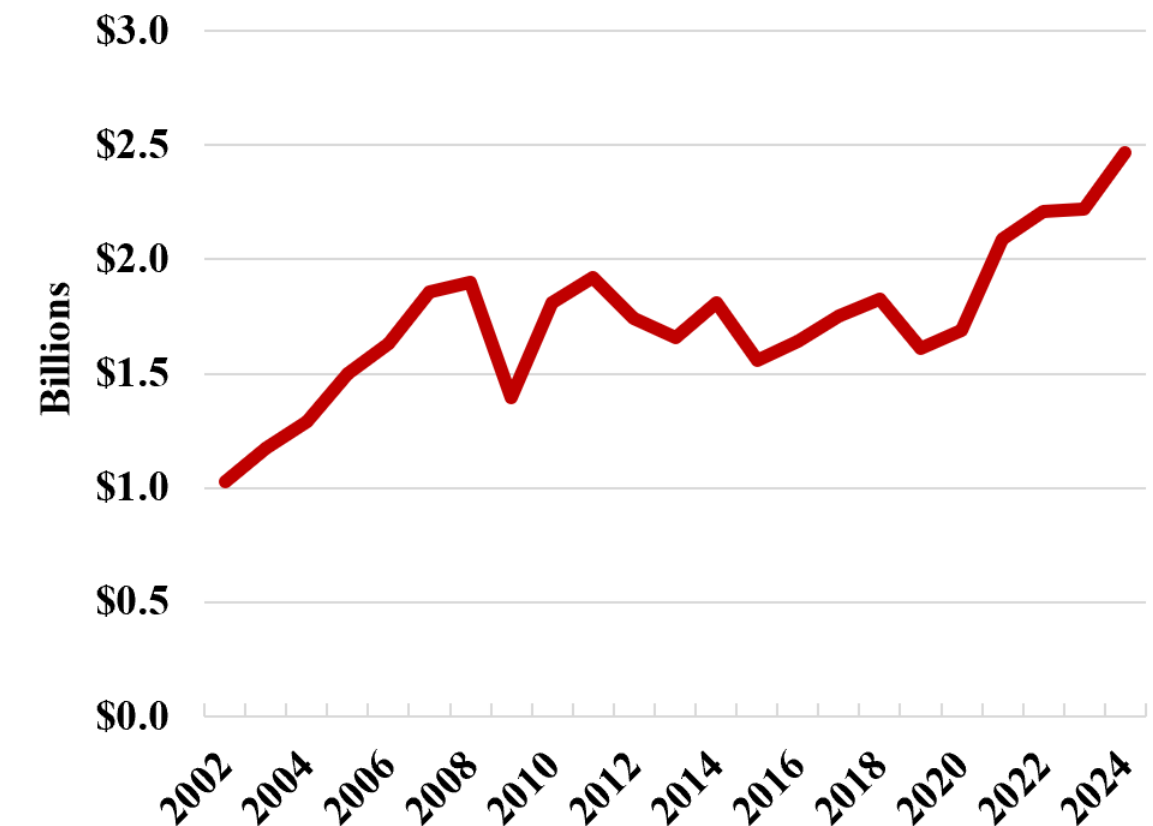




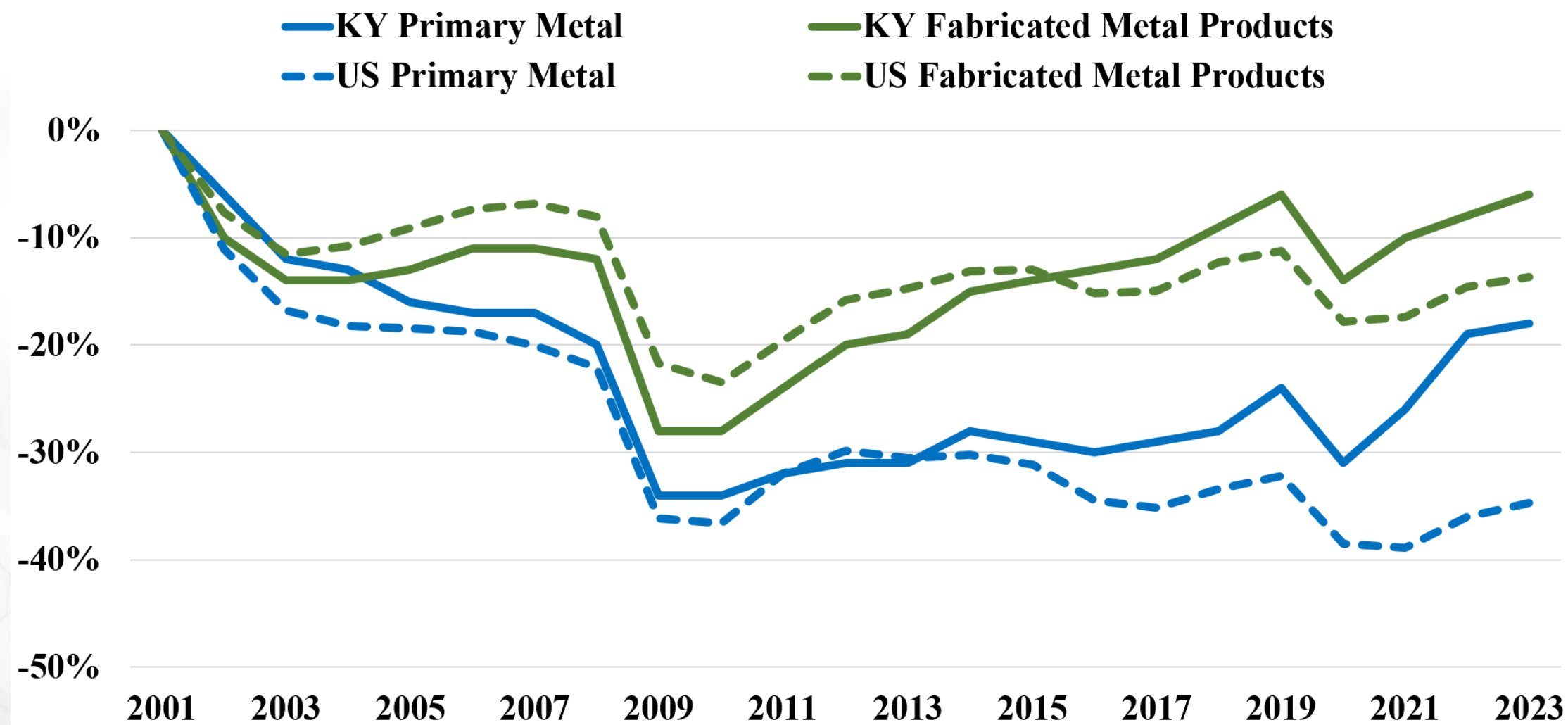
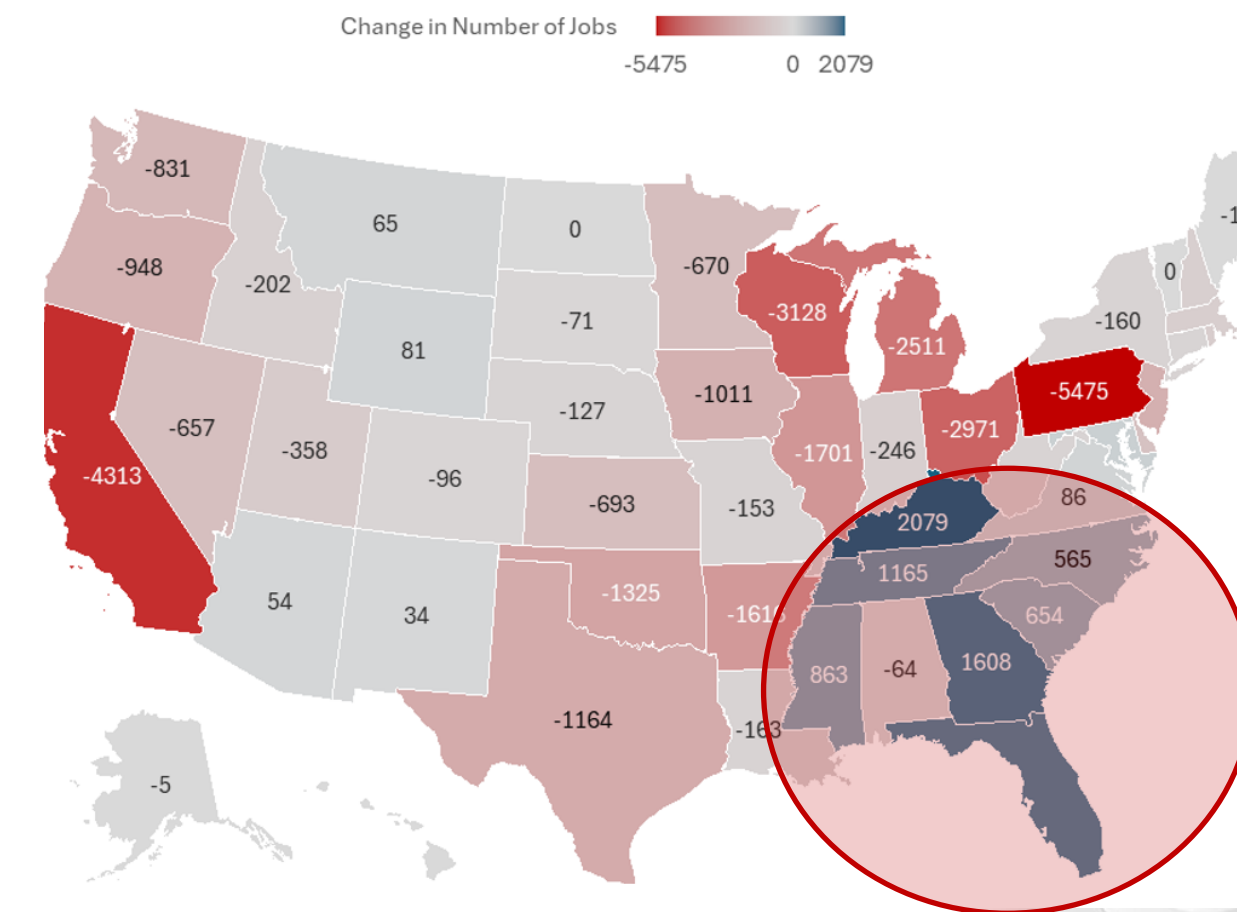
Metals Impact Study

- Completed with University of Kentucky Center of Business & Economic Research – Gatton College of Business & Economics

Total Value of Primary and Fabricated Metal Goods Exported Over Time



Change in Primary Metal Manufacturing Employment 2013 to 2023



Economic Impact of Metals



MI2/University of Kentucky Metals Impact Study finds:

- More than **1,000 metals facilities** in the Commonwealth
- More than **36,000 Kentuckians** directly employed
 - When including jobs dependent upon the industry, this number grows to **96,000**
- Wages & compensation - **\$6.9 billion**
 - Metals wages significantly above average (by 30% to 60% across regions):
 - \$90K/year for primary metals employees
 - \$67K/year for fabricated metals employees
- Primary metals jobs growth is **highest in the U.S.**
- Estimated **\$37.8 billion** in total economic output

What Is MI2?

- **Our Mission**

- Together, Making Kentucky the Destination for Metals Innovation

- **Our Founders**

- Founded by Public-Private Partnership between Metals Industry and CED

- **Our Focus Areas**

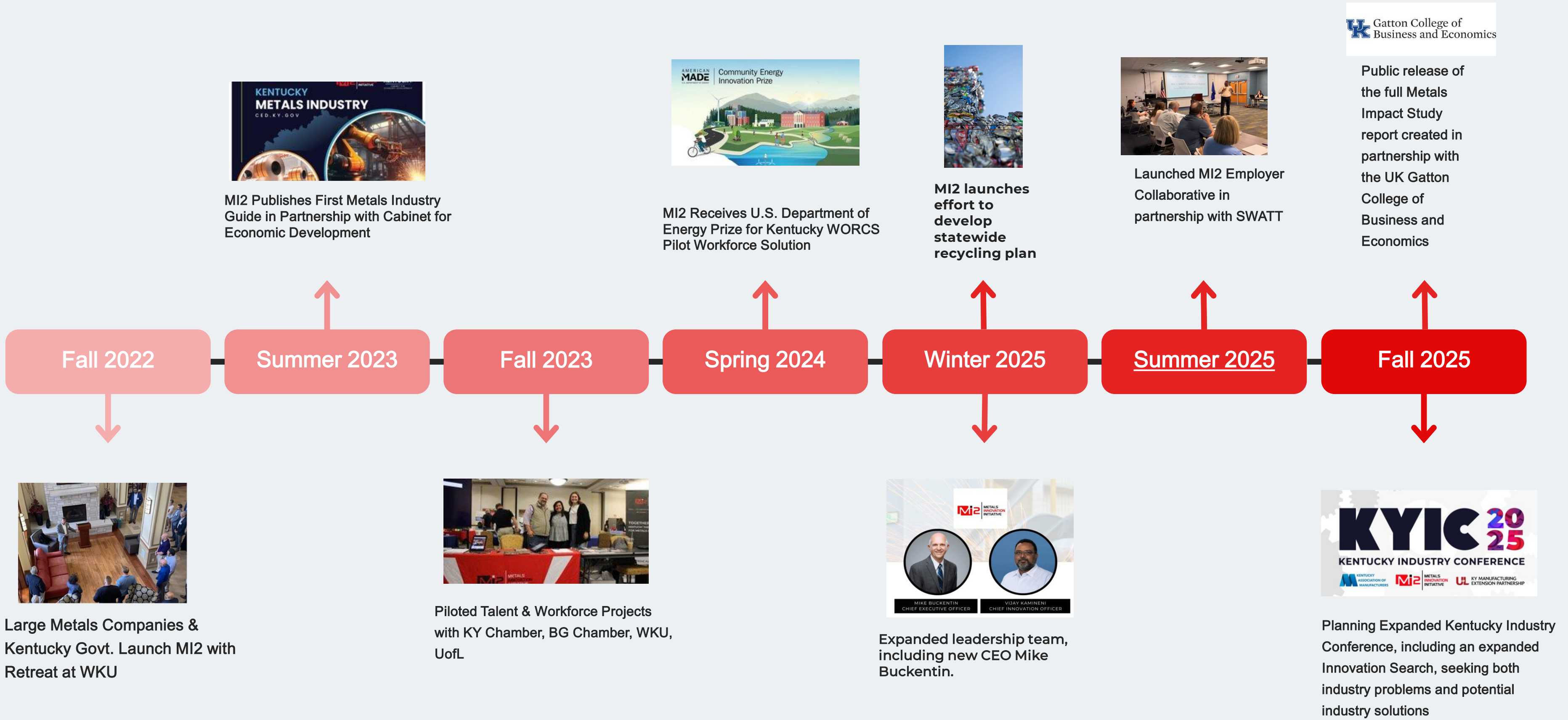
- Talent & Workforce
- Recycling
- Energy



This has long been the best-kept secret about Kentucky: Most people haven't traditionally known us as a leader in the metals industry. We are seeing that begin to change now.

-Vijay Kamineni, Metals Innovation Initiative

Significant MI2 Milestones



MI2 CURRENT MEMBERS

FOUNDING MEMBERS



A GROWING MEMBERSHIP



MI2 Board Members



David Brock
KY Innovation at KyCED
Executive Director



Dr. Timothy Caboni
Western Kentucky University
President



Marcel Christians
Wieland Recycling North America
President



Steve Clarke
Logan Aluminum
CEO



Bob Eviston
Nucor & River Metals Recycling
Vice President, General Manager



Henry Gordinier
Tri-Arrows Aluminum
President & CEO



Clive Grannum
North American Stainless
CEO



Mark Loik
Southern Coil Solutions
Co-Founder



Terry Samuels
Kentucky Science
& Technology Corporation
President



Jessie Schook
Kentucky Community &
Technical College System
Vice President of Workforce & Development

Talent & Workforce

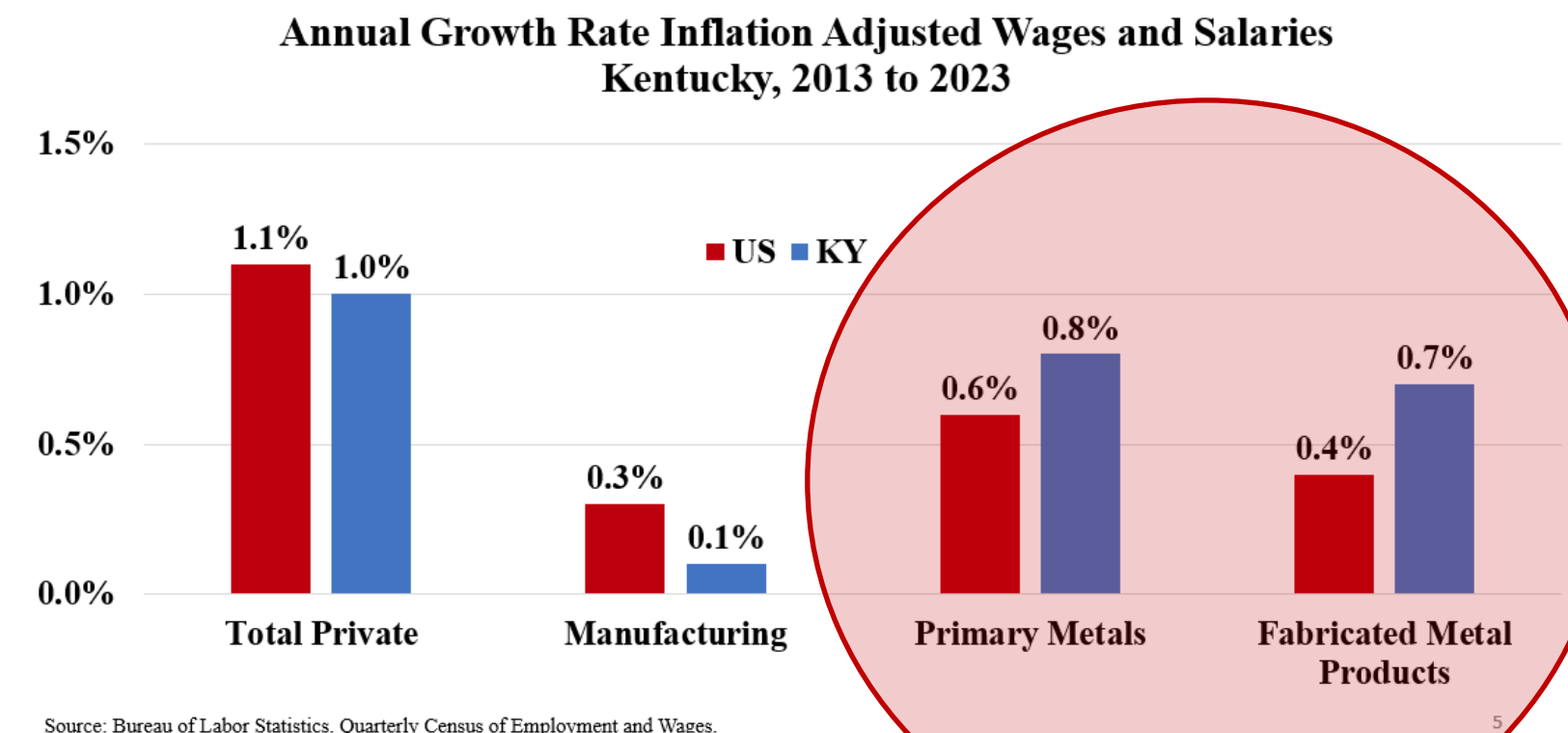


METALS
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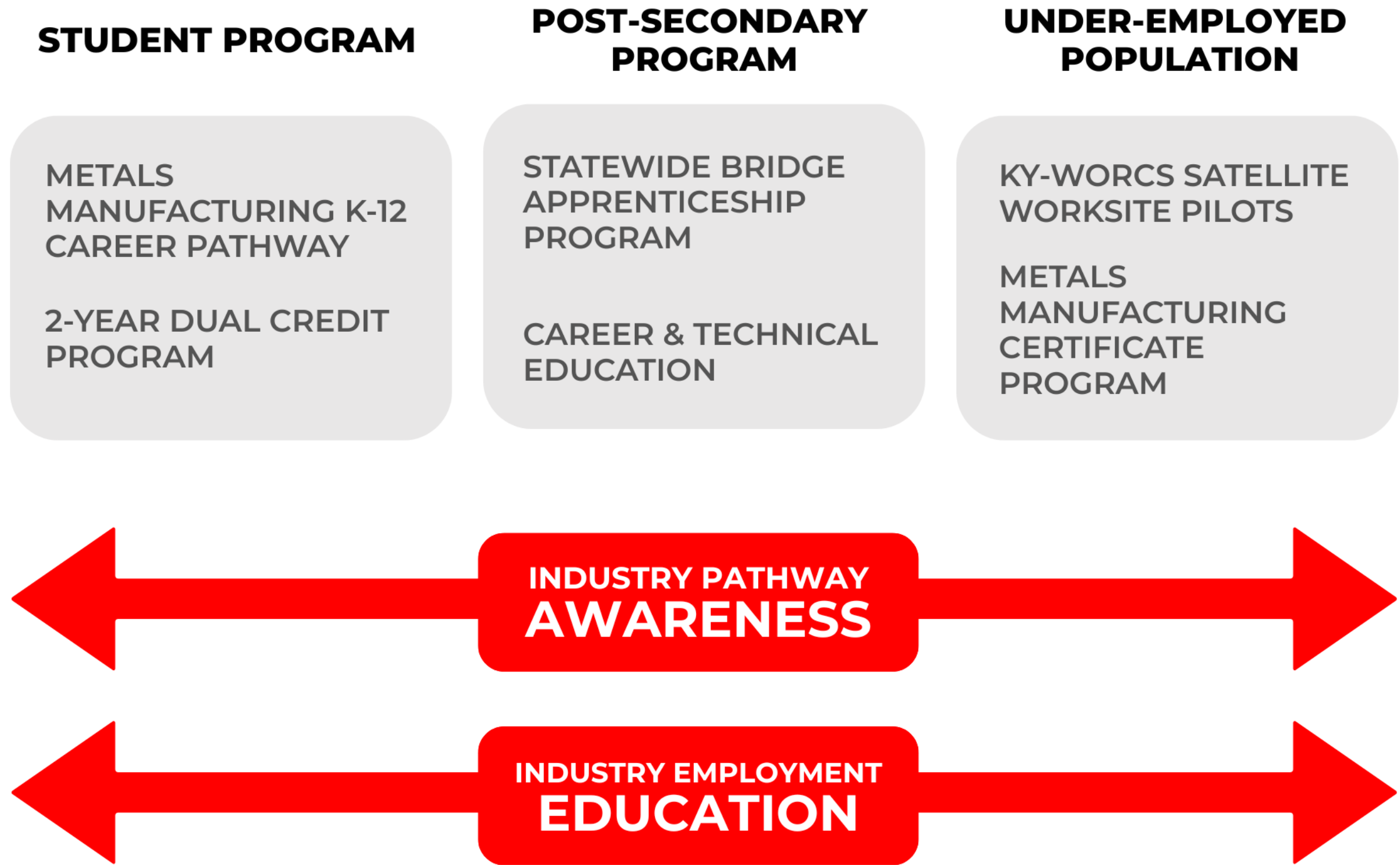
Need for Action

- On any given day, there are ~ 1000 metals industry jobs unfilled in Kentucky.
- Kentucky metals industry surpassed national average wages and salaries.
- Many of these are non-STEM operational jobs.
- In many cases, even the jobs that are being filled do not have the quality of the candidate that is needed.
 - This results in high turnover rates and significant excess cost.
- Current educational programs are not set up to meet this demand.

Average annual wages and salaries for metal manufacturing jobs have grown faster in Kentucky than the nation



Creating the Metals Pathway Solution



* Current proposed pilots: Logan, Warren, & Carroll counties

Proposed Public Private Partnership

High School & Post Secondary

Initial investment for:

- Student Support
- Tech/Instruction
- Program Design/Admin
- Education/Awareness

Initial economic impact: \$40 million

- Jobs: \$4.5 million
- Industry Value: \$27.6 million
- Indirect Econ. Dev: \$7.9 million

KY WORCS

Initial investment for:

- Regional Infrastructure
- Program Design/Admin
- Wraparound Services
- Tech & Supplies

Initial economic impact: \$16.7 million

- Jobs: \$1.9 million
- Industry Value: \$11.5 million
- Indirect Econ. Dev: \$3.3 million

Industry & State collaborating through grants and other programs.

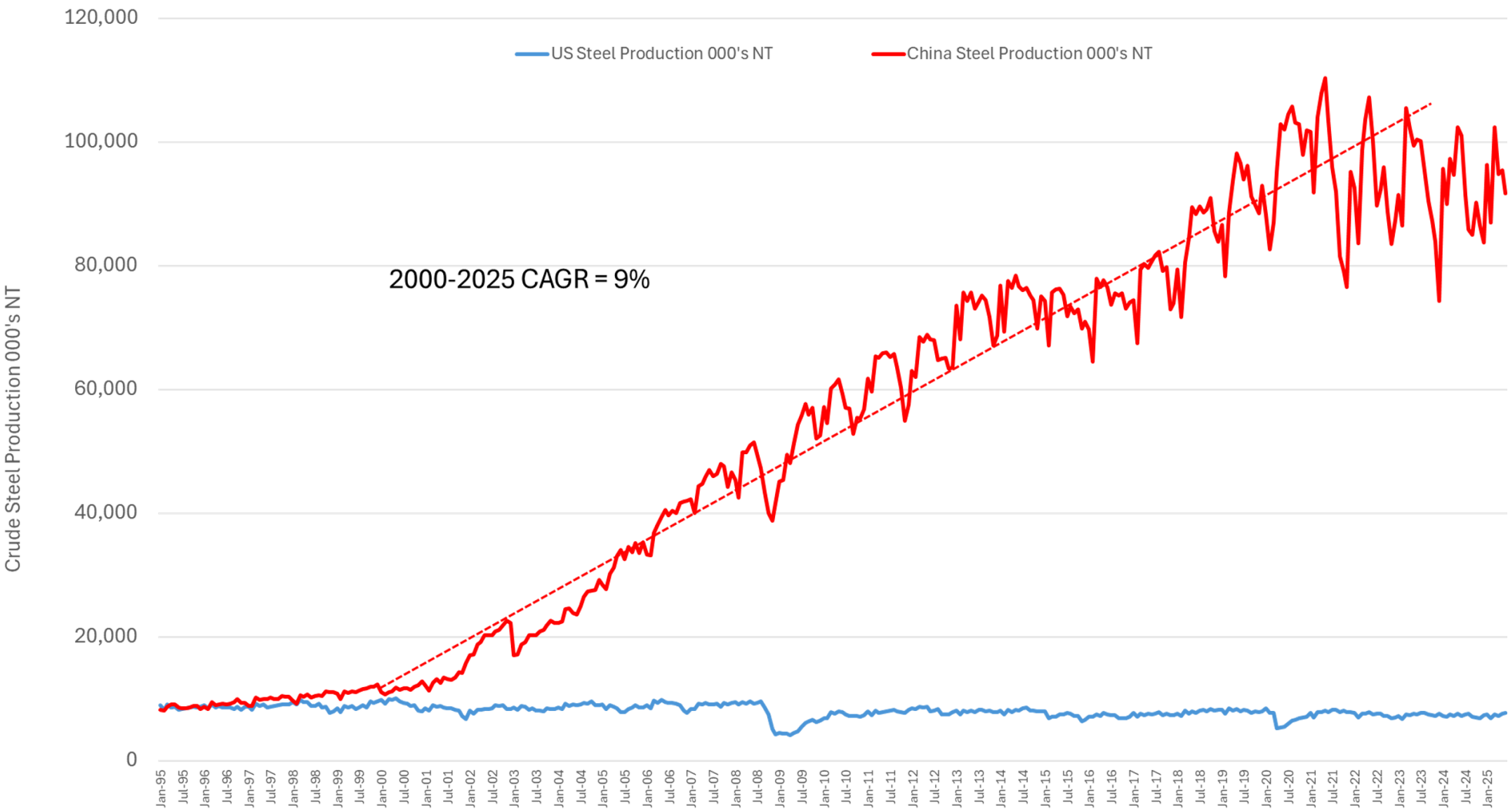
Recycling & Raw Material



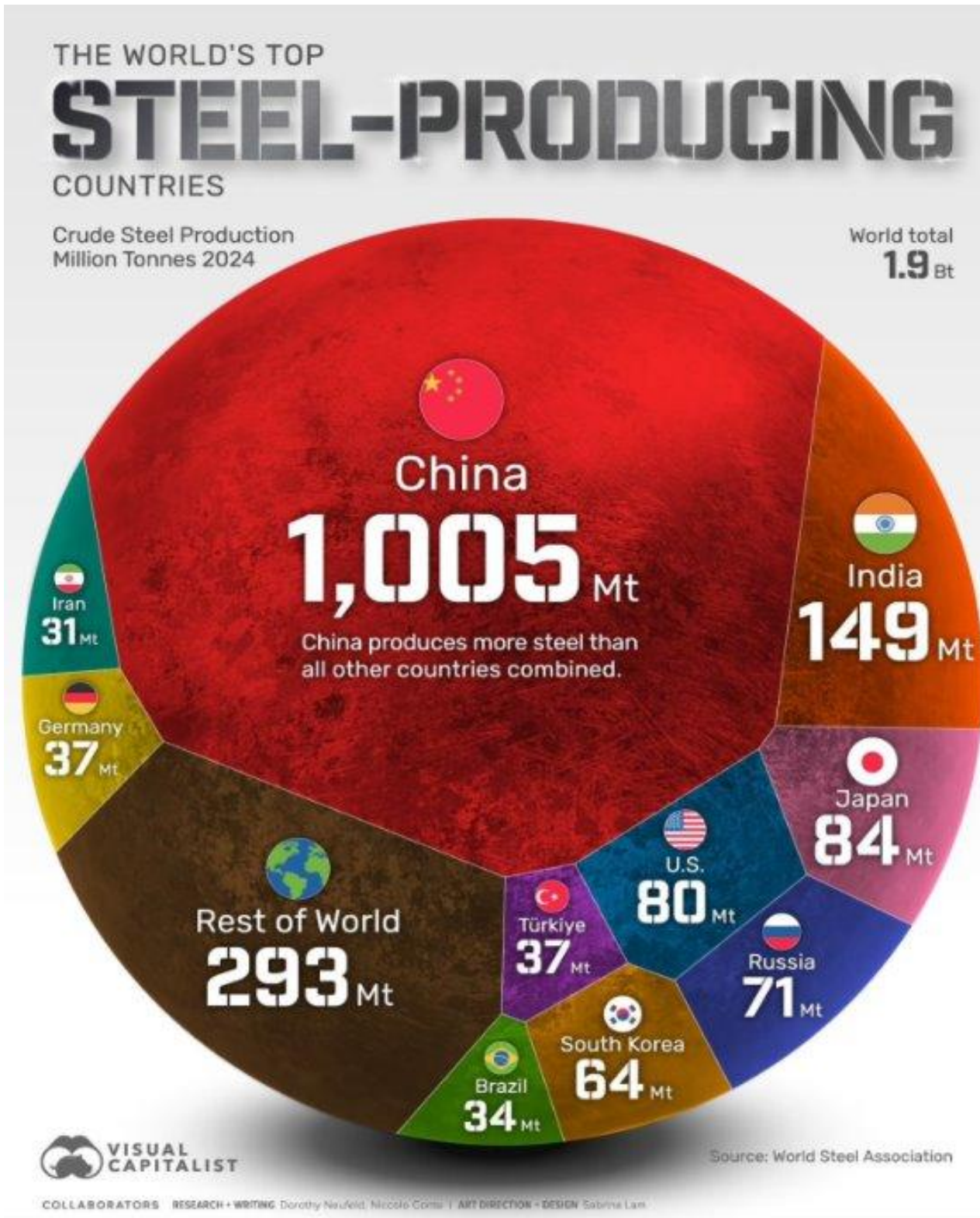
METALS
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China is overtaking the world in Steel Production

US VS CHINA STEEL PRODUCTION: 1995 – 2025 (JUN)



NUCOR®

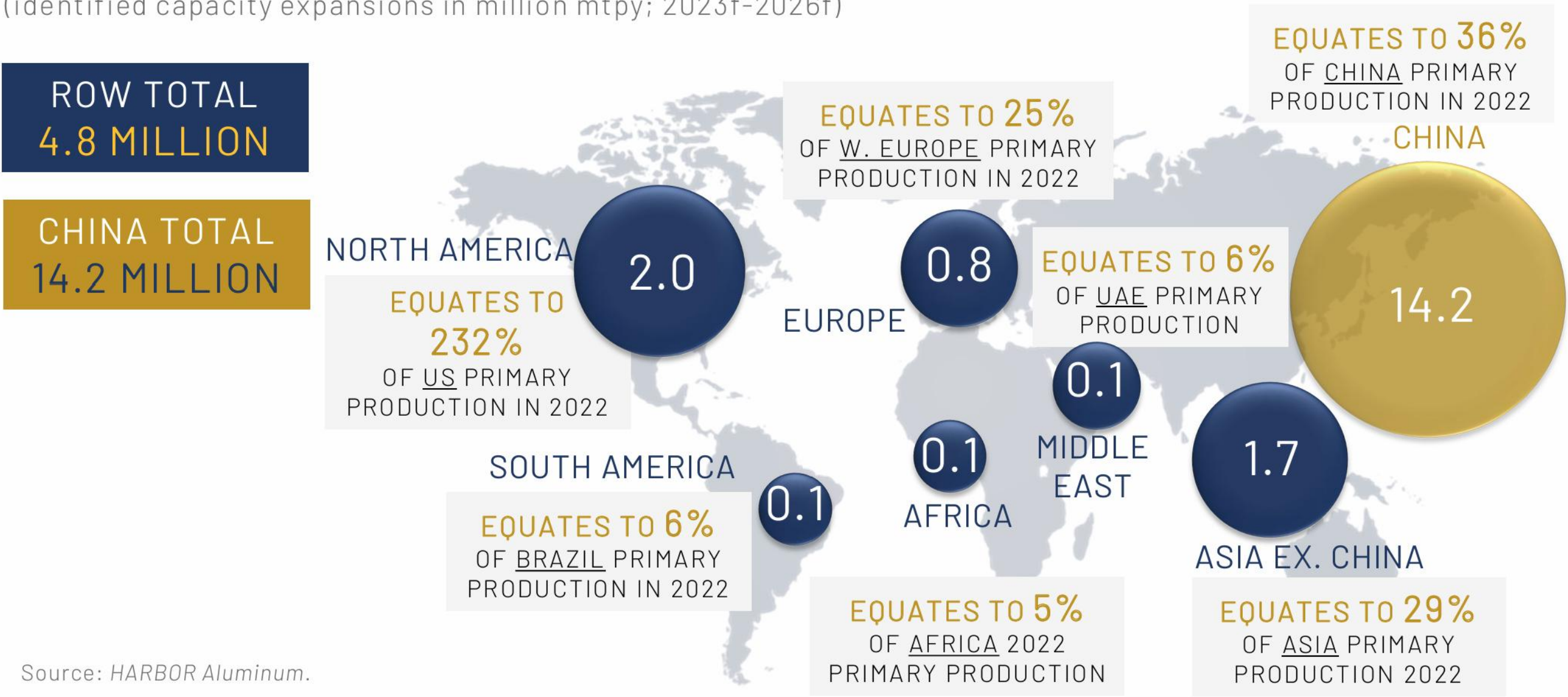


...And the same for Aluminum

...as a **global boom in scrap recycling** projects continues...

WORLD RECYCLING/SECONDARY ALUMINUM CAPACITY EXPANSIONS

(identified capacity expansions in million mtpy; 2023f-2026f)



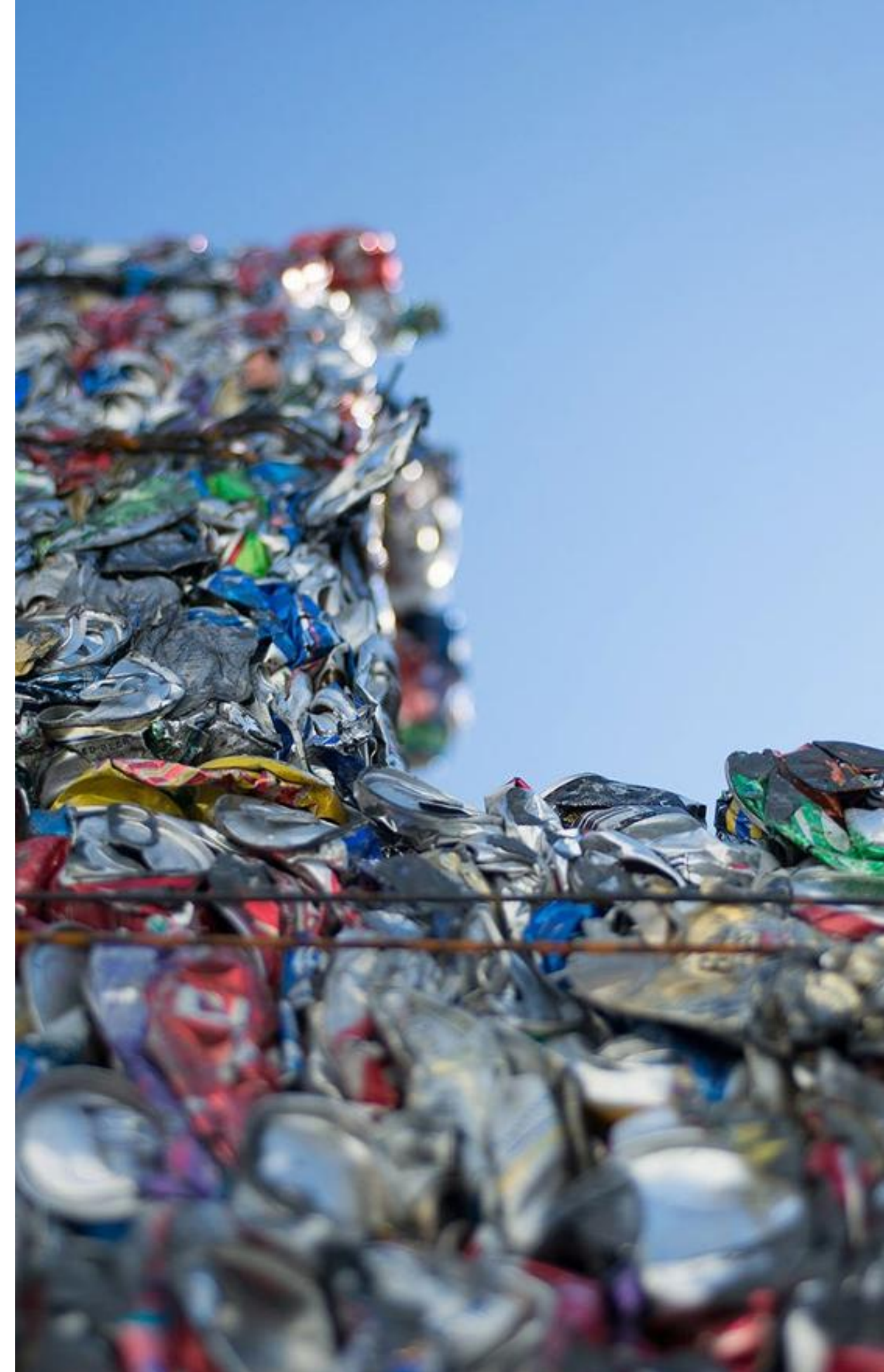


Domestic scrap feedstock crucial for global competitiveness

- A strong metals industry depends on access to high-quality recycled materials.
- Globally recycled material is increasingly becoming the main raw material source for metals – Fe, Al, Cu all depend upon it.
- Cost difference between traditional mining/refining and recycling is in the order of 10 to 1.
- Millions of dollars of raw materials going to landfill every year due to poor collection and processing systems.

Current Situation in Kentucky

- Kentucky recycling rates are below national average and must be improved:
 - E.g. Aluminum Cans 15% & Steel Cans 9%
 - Electronic waste recycling
- Isolated programs not optimized, cannot be scaled
 - Small # of pilots started in K-12, universities
 - Low level of community recycling
 - No coordination, standardization
- Need industry leadership
- Need collaboration across industry and with state





Proposed Solution

- MI2 will develop industry-based recycling business plan building upon and improving existing programs and adding more collection. Scale across the Commonwealth.
- Pursue possible partnerships with EEC and county solid waste infrastructure.
- Reach communities through:
 - K-12 schools across the state
 - Colleges and universities
 - Businesses and event spaces
 - Churches
 - Nonprofits
- Sortation processes with waste collection companies
- Alternate use of metals byproducts

Proposed Public Private Partnership

- **Initial investment for:**

- Collection Infrastructure
- Collection & Operation Costs
- Program Design
- Initial Awareness Campaign

- **Initial economic impact:** \$5-10 million

- Material Returned into Economy
- Jobs Created from Collection

Industry & State collaborating through grant and other programs for community/county collection infrastructure



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