

CONNECTING THE DOTS ON STEEL DECARBONIZATION INITIATIVES: CONTRIBUTING TO A GLOBAL INCLUSIVE DIALOGUE

GFSEC STAKEHOLDER EVENT



STEEL MANUFACTURERS
ASSOCIATION

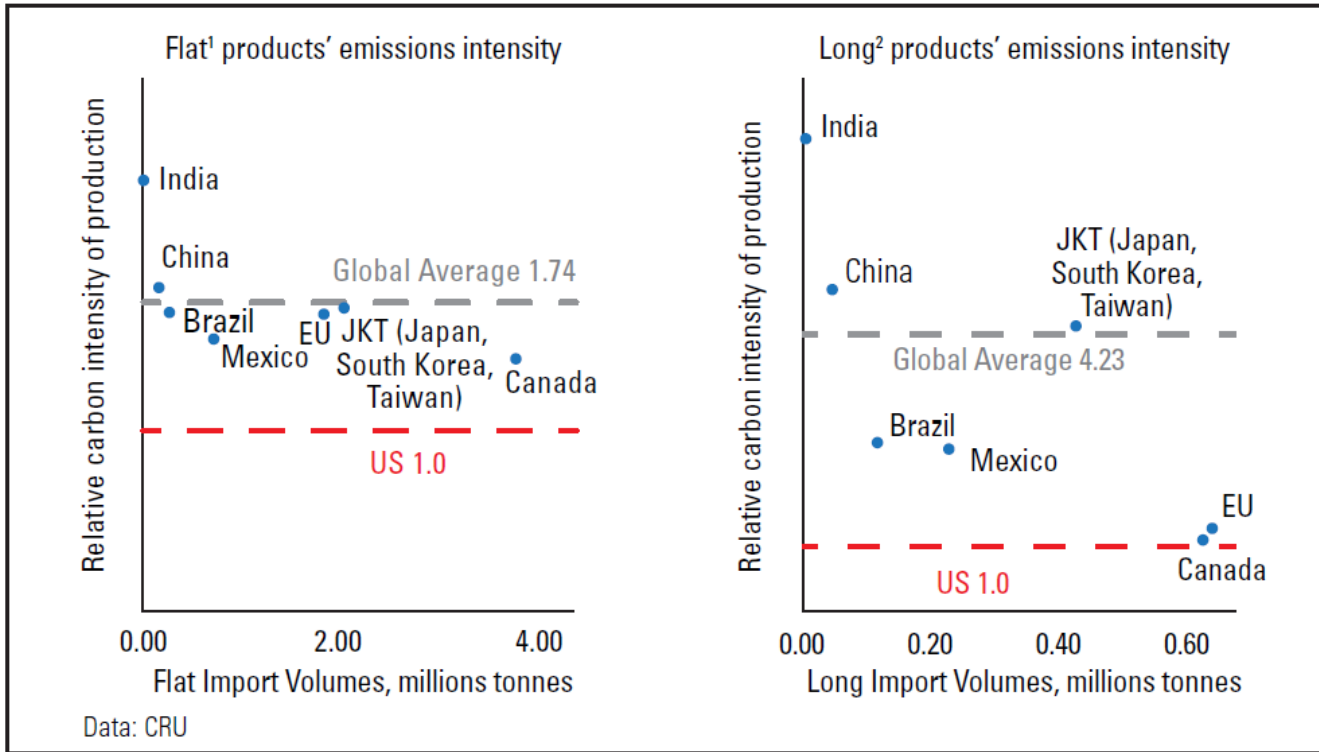
Questions to Answer for Industry

- What are the key components of an effective global action plan on steel decarbonization from an industry perspective?
- What are the main remaining challenges, including for capacity developments?
- How can policy makers and industry work together to better deliver on this?

Source: US Department of Energy Decarbonization Road Map

Steel's Carbon Advantage in the U.S.

Carbon Competitiveness of U.S. Steel Industry



1 Flat products means hot rolled coil ("HRC"), cold rolled coil ("CRC"), coil plate, tinplate and galvanized products. Plate products are not included.

2 Long products means rebar, wire rod and merchant bar. Sections, rail and seamless pipe are not included.

Key Points

- U.S. steel producers are 75% - 320% more carbon efficient than global producers
- America produces steel while emitting less carbon dioxide than all of our major competitors
- Current climate and trade rules do not give American steel producers credit for their cleaner operations
- The US steel industry has a major carbon advantage. Steel exporters to the US emit 50-100+% more CO₂ emissions per tonne than US producers on average
- The U.S. economy is three times more carbon efficient than that of China and nearly four times as efficient as India

Source: Climate Leadership Council, CRU

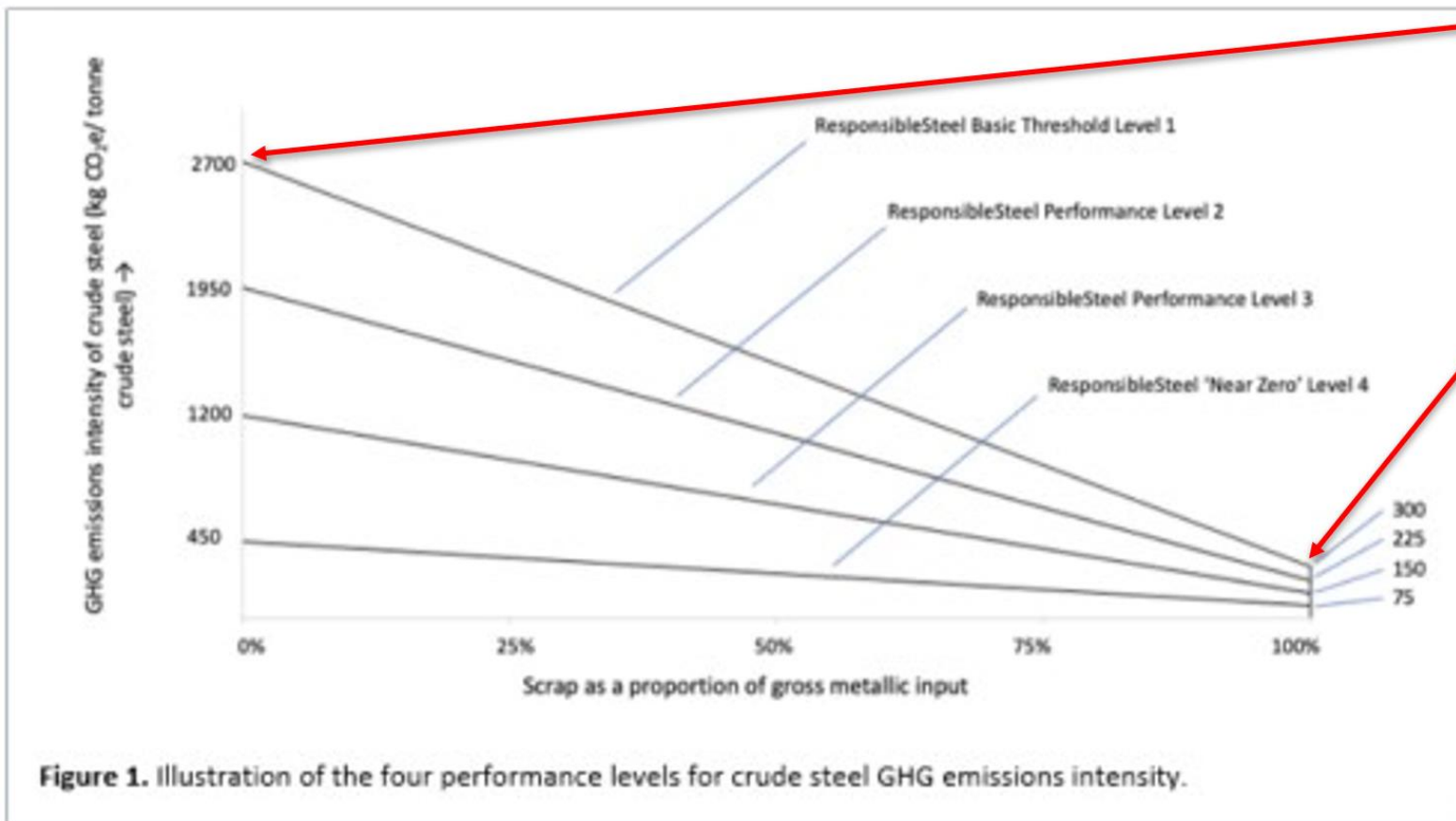
U.S. Perspectives

- A differentiated standard does not achieve adequate emissions reduction for the highest emitters. Any standard should be emissions and product focused, not process and raw material focused
- Any emissions policy needs to be technology agnostic. New furnace technologies and carbon capture processes have been and are being developed. The Inflation Reduction Act supports these efforts. Emissions policy needs to promote innovation and not be process-focused. A single standard does this; a differentiated approach does not.
- The standard should be based on actual, per-ton emissions. Only producers or countries that are below a long-term global emissions glidepath that is production process agnostic should be considered green. This incentivizes all producers to reduce emissions.

Multiple Standards vs. Single Standard



Steel product GHG thresholds



ResponsibleSteel sets CO₂e ceilings for the same product “9 times higher” for BF/BOFs compared to EAFs.

This penalizes scrap recycling.

Figure 1. Illustration of the four performance levels for crude steel GHG emissions intensity.

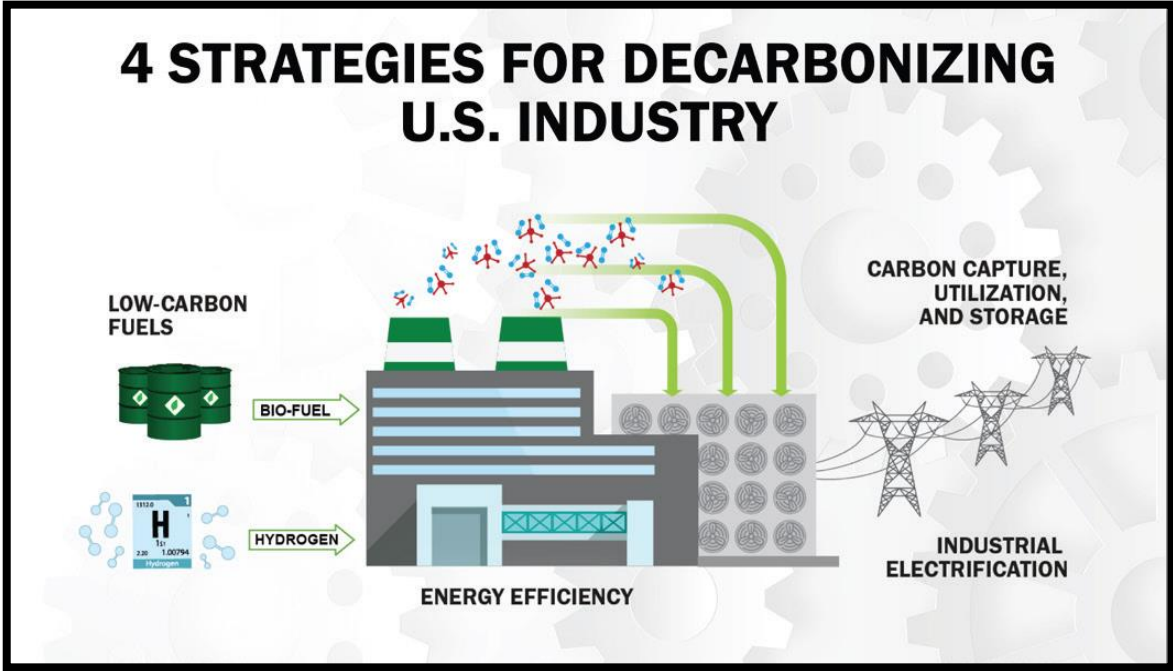
U.S. Department of Energy Decarbonization Road Map Inflation Reduction Act (IRA)



**Industrial
Decarbonization
Roadmap**

DOE/EE-2635
September 2022

United States Department of Energy
Washington, DC 20585



Source: US Department of Energy Decarbonization Road Map