

# Leveraging a Carbon Advantage: Impacts of a Border Carbon Adjustment and Carbon Fee on the U.S. Steel Industry

Key Findings

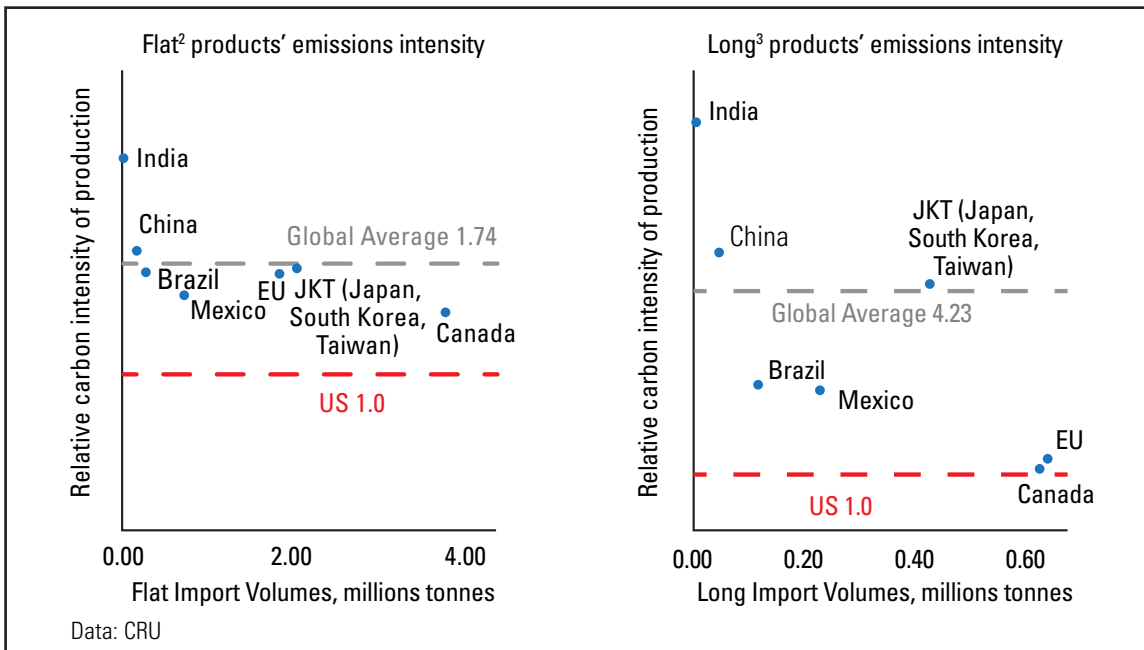
# Key Findings

The Climate Leadership Council commissioned CRU International Ltd., a global commodity markets intelligence firm, to study the impact of its carbon dividends plan on the U.S. steel industry. The Council summarized the study's key findings below.

## 1. The US steel industry has a major carbon advantage

- The U.S. steel industry is 75% - 320% more carbon efficient than global producers, depending on the product segment.
- America produces steel while emitting less carbon dioxide than all of our major competitors
- Under the current rules of climate and trade, our manufacturers get no credit for their cleaner operations

### Carbon Competitiveness of U.S. Steel Industry<sup>1</sup>



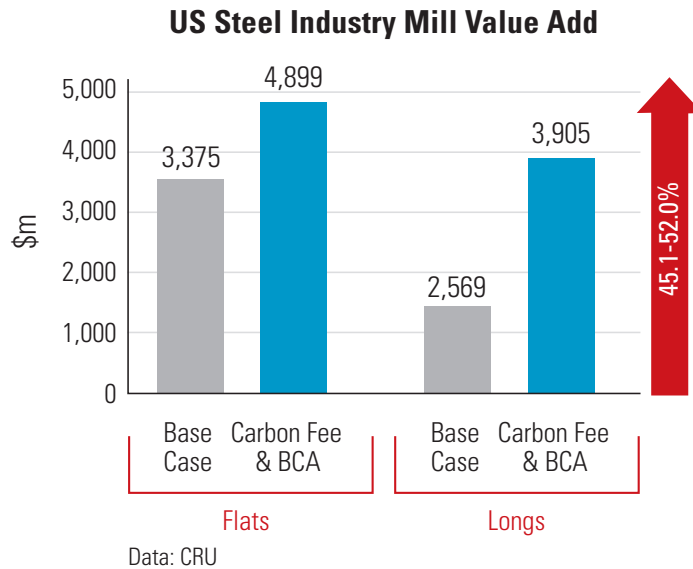
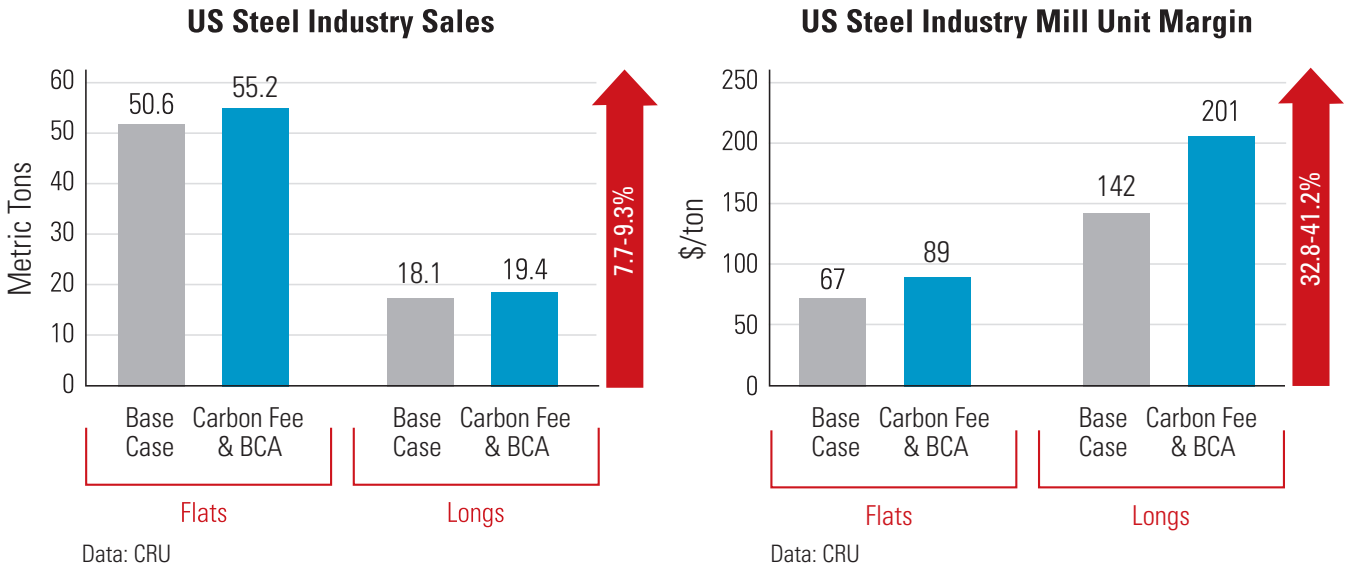
<sup>1</sup> Carbon-intensity of steel production relative to U.S. (U.S. = 1.0)

<sup>2</sup> Flat products means hot rolled coil ("HRC"), cold rolled coil ("CRC"), coil plate, tinplate and galvanized products. Plate products are not included.

<sup>3</sup> Long products means rebar, wire rod and merchant bar. Sections, rail and seamless pipe are not included.

## 2. Leveraging America's carbon advantage benefits domestic steel

- A carbon fee and border adjustment would unlock a competitive advantage for the U.S. steel industry
- By applying the same carbon fee on domestic steel as the more carbon-intensive imports, U.S. steel sales increase by between 7–9%
- Industry value add will rise by \$2.8 billion in the first year



## 3. U.S. manufactured steel displaces imports

- With a policy to account for carbon emissions, more efficient U.S. steel supplies a greater share of the U.S. market
- Steel imports drop by about 50%
- Steel from some of the least carbon efficient markets, like China and Brazil, are further reduced or pushed out of the U.S. market altogether

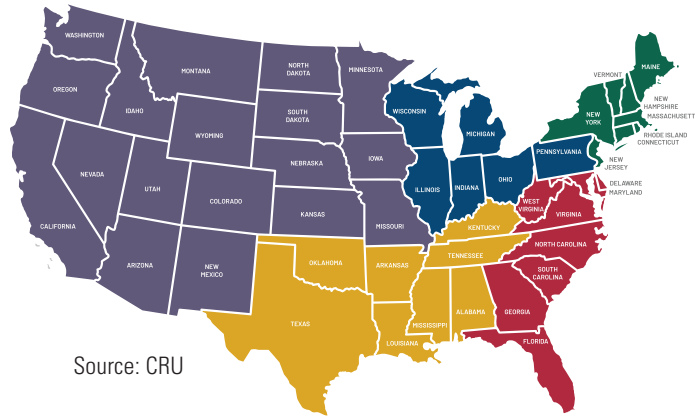
### IMPORTS



Source: CRU

## 4. Benefits accrue across the country

- The economic benefits to the US steel industry are likely to be relatively broad based across regions
- Steel production increases in all major steel regions: the Great Lakes, the South and the West
- All regions see economic output grow



Source: CRU

### US Steel Industry Value Gains By Region

- Great Lakes - \$958 million
- South Atlantic - \$421 million
- Northeast - \$78 million
- South Central - \$971 million
- West & Other Midwest - \$433 million

## 5. America's carbon advantage extends across the economy

- Compared to the rest of the world and our largest trading partners, America has a decisive carbon advantage throughout the economy
- Goods manufactured in the U.S. are 40% more carbon-efficient than the world average
- 75% of U.S. imports come from less carbon efficient countries
- The U.S. economy is three times more carbon efficient than that of China and nearly four times as efficient as India

### U.S. Carbon Advantage Over Key Trading Partners By Sector

	USA	Brazil	Canada	China	EU	India	Mexico	Russia
Chemicals & pharmaceuticals	1.0	0.9x	1.5x	2.6x	0.8x	2.1x	1.2x	5.5x
Rubber and plastic products	1.0	0.9x	1.0x	2.7x	0.7x	2.1x	1.1x	2.9x
Basic metals	1.0	1.3x	1.0x	1.8x	0.9x	2.7x	0.7x	3.7x
Fabricated metal products	1.0	1.3x	0.9x	3.1x	0.9x	6.1x	1.4x	4.8x
Computer, electronic and optical products	1.0	2.5x	2.3x	5.7x	2.1x	8.0x	3.4x	7.4x
Electrical equipment	1.0	1.5x	1.2x	3.1x	1.0x	3.9x	1.4x	4.8x
Machinery and equipment	1.0	1.0x	0.9x	2.8x	0.8x	4.0x	1.2x	4.5x
Motor vehicles and trailers	1.0	1.2x	0.9x	2.4x	0.7x	3.5x	1.0x	3.6x
<b>Economy-wide</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>3.2</b>	<b>0.9</b>	<b>3.8</b>	<b>1.4</b>	<b>4.2</b>

- U.S. Carbon Advantage (foreign competitors less carbon efficient)
- U.S. Carbon Disadvantage (foreign competitors more carbon efficient)
- U.S. Carbon Efficiency or Equivalent

Source: MacroDyn Group calculations based on data from the International Energy Agency, the World Input-Output Database environmental accounts and the Global Trade Analysis Project.

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