

Abstract

The iron and steel industry plays an essential role in making our daily life possible, and because it is deeply intertwined in a wide range of sectors—including transportation, business, industry—it contributes broadly to the overall carbon footprint of the economy and its environmental impacts. Steel production requires a lot of energy and often makes up a large portion of a nation's energy consumption. China, as the largest steel producing country in the world for 25 consecutive years, needs to take corrective action in the industry. This paper explores the greenhouse gas emissions issues raised by steel production in China and develops potential methods to slow its environmental impact by providing a set of policy ideas for regulating or encouraging China's steel industry to decrease its contribution of CO₂ emissions. Due to Beijing's 2060 carbon neutrality goal, China's steel industry is facing forced shut downs which did not meet the carbon emission standards and massive layoffs, resulting in a significant decline in steel supply. Although efforts like these have been made to decrease the industry's environmental impact, we do not know much about them because access to resources is largely restricted to members of the China Iron and Steel Association. To fill this gap, this research gives an overview of several steel production processes and provides a detailed analysis of the existing policies and strategies in China that guiding the development of the iron and steel industry.

The Challenge of Addressing Impact of China's Crude Steel Production on Global Warming
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