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ACCELERATING EAST ASIAN CORPORATE CLIMATE ACTION

CHINA'S PAUSE ON STEEL POLICIES MARKS AN OPPORTUNITY ON LOW CARBON PRODUCTION

On 22 August 2024, China announced the suspension of all new steel production expansion in a nod to domestic concerns regarding overcapacity and international pressure regarding the flooding of Chinese steel exports abroad.[1]

In its announcement, the MIIT (Ministry of Industry and Information Technology) cited "inadequate policy implementation, imperfect supervision and implementation mechanisms" as reasons to suggest that its existing steel capacity policies needed further tweaking.

These policies, "Implementation Measures for Capacity Replacement in the Steel Industry", were announced in 2021 to deal with issues related to steel overcapacity, equipment replacement and air pollution, among others.[2]The text was broad and robust, and while the policy gave no specific numerical targets for reducing overcapacity, it did provide a framework for capacity reduction and replacement. It also specified how much old steel capacity needed to be retired for new capacity to be approved, and how new capacity needed to adhere to higher environmental and performance standards. Thus, what China had hoped to achieve with these policies was a more rationalised steel supply and demand environment and a gradual shift towards cleaner steel production.

However, two trends can be observed since 2021.

The first trend is regarding the supply and demand environment. China's enormous steel capacity, which accounted for more than half of the world's total, rose from 1.146 billion in 2021 to 1.173 billion tonnes in 2023. At same time China's steel demand, whilst recovered in 2022 and 2023 (following the COVID crisis), has broadly remained soft. And because demand has not kept pace with steel capacity growth expansion, steel capacity utilisation declined, falling from 90.1% in 2021 to 86.9% in 2023, leading to negative impact on corporate profitability and some calling it the most severe crisis ever. [3][4][5]This supply and demand imbalance can be seen at the global level as well. Chinese steel exports have continued to enter a global steel market that broadly suffers from overcapacity, and while steel producing countries have blamed each other for the crisis, much thinly veiled criticism has been directed at China. [6][7]

The second trend is that since 2021 when the policies were enacted, the global steel market has been evolving to cater to increased demand in low-carbon steel; a shift that the Chinese steel market is uniquely positioned to lead with its vast renewable energy and hydrogen electrolyser leadership. However, as of now, China is not on track to meet its 2025 target for electric arc furnace (EAF) capacity to account for 15% of steel capacity: At end 2023, China's EAF share was at 10.0%, only up slightly from 9.7% in 2022, and down from 10.7% in 2021.[8]

1 https://www.miit.gov.cn/jgsj/ycls/wjfb/art/2024/art_beae9b1682de4457b555b42c5f839f4f.html
2 Ministry of Industry and Information Technology No. 46 [2021], (https://www.gov.cn/zhengce/zhengceku/2021-05/07/content_5605092.htm)
3 https://gmk.center/en/infographic/chinas-steel-market-in-2021-2023-overcapacity-and-export-growth/
4 https://splash247.com/only-5-of-chinese-steel-producers-are-currently-profitable/
5 "Top steelmaker Baowu warns Chinese producers face severe crisis" https://www.ft.com/content/41c9fa0d-9b3e-48d4-b4b4-bb8f8863c0e0
6 https://www.acuitykp.com/blog/steel-overcapacity-a-global-problem/
7 https://www.fdiintelligence.com/content/data-trends/chinas-steel-overcapacity-foments-dumping-concerns-83748
8 http://www.csteelnews.com/xwzx/gdft/202408/t20240807_90921.html#:~:text=%E4%BD%86%E8%87%AA2021%E5%B9%B4%E5%90%8E,%E8%BE%BE%E5%88%B069.0%25%E3%80%8154.2%25%E3%80%82

While the overall capacity for lower-carbon intensive EAF technology capacity has increased, higher-carbon intensive blast furnace-basic oxygen furnace (BF-BOF) steel capacity has not meaningfully declined.[9] This dampens the steel sector's contribution towards China's goal of peaking emissions during the upcoming 15th Five Year Plan period (2026 - 2030).

In the face of these two trends, MIIT's pause in approving new steel capacity in the policy therein lies several opportunities, and will allow policymakers to further craft policies to help China meet its potential to be world leader in low carbon steel production.

This must start with MIIT better outlining its supervision implementation mechanisms, as China's steel overcapacity issues have continued to grow despite the 2021 policies. Additionally, given the tight window to peak emissions by 2030, China would benefit from redoubling efforts to increase the use of EAF technology, as it is a stepping stone towards even lower carbon intensive steel production methods such as hydrogen-based direct reduced iron (H_2-DRI), and tightly control its growth of BF-BOF steel capacity, particularly the relining of such assets.[10] Here, China's huge investments in hydrogen production give it wind in its sails towards H_2-DRI, and should reduce the production premium between low carbon green steel and high carbon steel over time.[11]

Finally, these actions coupled with ongoing energy-efficient efforts, resources recycling, and short-process production utilising scrap, will give China a much better chance of meeting its net zero targets, and respond to the increased demand for green steel.[12] In other words, with the right set of policies, China could "have its cake and eat it too", in both addressing its steel overcapacity and climate targets.

9 https://energyandcleanair.org/wp/wp-content/uploads/2024/07/CREA_China_Steel_2024-H1.pdf
10 https://transitionasia.org/japanese-financial-institutions-intensify-scrutiny-on-steel/
11 https://transitionasia.org/green-steel-economics-china-factsheet/
12 https://about.bnef.com/blog/green-steel-demand-is-rising-faster-than-production-can-ramp-up/