



Press release

Stronger green steel pathways in China could deliver a 37% emissions cut from peak by 2035

A structural shift away from coal-based steelmaking could help the sector become a key pillar of national climate goals.

BEIJING, 31 March 2026 - By prioritising a shift to greener electric arc furnace (EAF) steelmaking, China's steel sector emissions could fall to nearly 37% below peak levels by 2035, significantly outperforming national benchmarks. That's according to the latest biannual analysis of China's steel sector from [the Centre for Research on Energy and Clean Air \(CREA\)](#), which suggests that a structural shift away from carbon-intensive steel production could not only revive the industry's climate credibility but also restore financial stability and international market trust.

The analysis finds that demand-driven contraction, rather than structural shift to green steelmaking, was the primary driver of emissions reductions in China's steel industry over the past few years. In 2025, crude steel production fell below 1 billion tonnes (-4.4% YoY) for the first time since 2020, following a prior decline in 2024 (-1.4%). The cumulative contraction over 2024–2025 led to an estimated 150 Mt reduction in CO₂ emissions — substantially larger than reductions expected from policy-led measures — highlighting the limited role of structural decarbonisation to date.

Moreover, China's missed 2025 green steel milestone highlights how current adjustment mechanisms have reinforced the dominance of blast furnace-blast oxygen furnace (BF-BOF) steelmaking. Prioritising the deployment of EAF over the next five years will be critical — raising the share to 15–20% by 2030 could reduce BF-BOF production by around 80–120 Mt, equivalent to Japan's annual steel output and approaching that of India.

Under such a prioritised EAF transition, China's steel emissions could fall to nearly 37% below peak

levels by 2035, well beyond the economy-wide net emissions reductions in China's updated NDC target of 7–10%. While it's important to note that the steel sector is widely considered to have peaked around 2020, well ahead of the national timeline, the potential drop remains a highly significant one.

Structural reform of the industry could also address the persistent overcapacity and weak domestic demand that have sharply eroded profitability while driving liabilities up by over CNY 1 trillion (+20%) between 2020 and 2025. A prioritised EAF pathway, reaching 20% by 2030, could support a recovery in profits of up to CNY 220 billion and reduce the asset-liability ratio to around 60–62%, shifting the sector from elevated financial risk to a more stable footing.

Green competitiveness also becomes critical for the export market. Excess supply amid weak domestic demand has driven a surge in exports — from 54 Mt in 2020 to 134 Mt in 2025 — raising China's share in the global steel trade from 13.3% to 29.2% and intensifying exposure to trade frictions. In this context, increasing the share of green steel will be crucial for strengthening the sector's global competitiveness, particularly as carbon-related trade measures, such as the EU's Carbon Border Adjustment Mechanism (CBAM), continue to tighten.

China's steel sector can strengthen its credibility in climate commitments, financial liability, and global trade in the following ways:

- Accelerate blast furnace phase-down to ease supply pressures, improve market conditions, and directly reduce the sector's total emissions.
- Raise the EAF share to 20% by 2030, alongside stronger economic incentives to accelerate structural adjustment in the sector.
- Tighten financial support for inefficient steelmakers and operationalise exit mechanisms.
- Align climate, industrial, and trade policies to strengthen green competitiveness.

'The challenges facing China's steel industry stem from structural imbalances in capacity, notably the misalignment between coal-based assets and green transition goals. The 15th Five-Year Plan provides a critical window to address these tensions. A successful transition would demonstrate that industrial decarbonisation can advance alongside financial resilience and constructive engagement with global markets — helping restore the sector's credibility,' said Xinyi Shen, Senior Advisor at CREA and author of the report.

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Contacts

Xinyi Shen, Senior Advisor, CREA

xinyi@energyandcleanair.org

China team, CREA

queries-china@energyandcleanair.org

Note to editors

The publication related to this press release is available [here](#).

Our earlier biannual China steel analyses are available [here](#).

About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. We use scientific data, research and evidence to support the efforts of governments, companies and campaigning organisations worldwide in their efforts to move towards clean energy and clean air.

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