

KEY POLICIES HIGHLIGHTS FOR THE STEEL INDUSTRY IN CHINA (Q1 2024)

The Chinese government has recently unveiled a series of significant announcements and action plans aimed at advancing decarbonisation initiatives.

In this blog, we explore and analyse some of these announcements and review how these action plans and initiatives may influence steel companies' decarbonisation efforts in China.

While recognising that these measures represent only a portion of the comprehensive steps needed, we welcome the government's announcements as they align with the direction toward promoting sustainable industrial practices.

What has been announced since March 2024

On March 13, the State Council issued the "Action Plan to Promote Large-scale Equipment Updates and Trade-ins for Consumer Goods ([推动大规模设备更新和消费品以旧换新行动方案](#))" to provincial and municipal level governments. The key actions that are relevant to the steel sector are to accelerate the formulation and revision of standards in areas such as energy conservation, carbon reduction, environmental protection, safety and recycling. These standards, according to the action plan, need to benchmark against international advanced levels, but with consideration of actual industrial development, the enterprise capacity and consumer acceptance, and promote the implementation of these standards in an orderly manner. Regarding equipment upgrade initiatives, the steel sector is one of the key industries listed in the action plan alongside non-ferrous metals, petrochemicals, chemicals, building materials, electricity, machinery, aviation, shipping, textiles and electronics. The plan aims to vigorously promote the upgrade and technological transformation of production equipment, energy-using equipment and power generation and distribution equipment.

On March 27, seven government agencies including the State Administration for Market Regulation (市场监管总局), National Development and Reform Commission (NDRC, 国家发展改革委), Ministry of Industry and Information Technology (工业和信息化部), Ministry of Ecology and Environment (生态环境部), Ministry of Housing and Urban-Rural Development (住房和城乡建设部), Ministry of Commerce (商务部) and Ministry of Emergency Management (应急管理部) issued the "Action plan to promote equipment updates and trade-ins for consumer goods through standards ([以标准提升牵引设备更新和消费品以旧换新行动方案](#))" which stated that national standards such as energy consumption standard, efficiency standard, emission standards and safety standards of consumer products, equipment and machineries will be issued. The action plan also mentions the exploration of integrating requirements for recycled metals into standards for household appliances, automobiles, and electronic products to facilitate closed-loop material usage. It aims to enhance standards and

policies for importing recycled resources, with a focus on expanding the variety and scale of imports as much as possible.

On March 17, the NDRC issued the "Action Plan for Special Management Measures for Central Budget Investment in Energy Conservation and Carbon Reduction ([节能降碳中央预算内投资专项管理办法](#))."

The measures spelt out clearly that the government will support projects in the "dual-carbon" field that demonstrate leading technological capabilities, significant emissions reduction effects, and clear demonstration effects. Priority will be given to projects included in the "List of Green and Low-Carbon Advanced Technology Demonstration Projects (First Batch) [绿色低碳先进技术示范项目清单 \(第一批\)](#)", which was subsequently published on March 30. The steelmaking projects on the list include the digitalisation of production processes, the commercialisation project for the Hydrogen-rich Carbon Circulating Oxygen Blast Furnace (HyC-ROF) (富氢碳循环氧气高炉商业化示范项目) and a CO2 resource utilisation and carbon sequestration demonstration project (二氧化碳资源化利用及固碳示范项目).

Transition Asia's Comments

From our interactions with steel companies in China, we have learned that the sector faces several challenges in transitioning to low-carbon steel. These challenges include the lack of detailed sector-based transition plans and unclear demand for low-carbon steel products, which suggests that the burden of green steel premiums will fall on steel manufacturers. Additionally, uncertainty surrounding the economics of technologies has made companies cautious about making significant capital investments in this economic environment.

Revision of key national standards could provide a clear signal for demand for green products

Although the new action plans do not address all challenges faced by steelmakers, initiatives like the State Council's "Action Plan to Promote Large-scale Equipment Updates and Trade-ins for Consumer Goods" and the coordinated effort by seven departments to enhance equipment updates and consumer goods trade-ins aim to promote the completion or revision of 294 key national standards within the next two years. We anticipate that these standards will, over time, encourage the use of low-carbon products at both individual and corporate levels. The launch of revised standards will be noteworthy as green procurement practices will signal strong demand for manufacturers and could stimulate demand for low-carbon products and resources.

There is a clear signal of expanding emission trading markets into the steel sector

With the EU's Carbon Border Adjustment Mechanism (CBAM) set to be formally implemented in 2026, carbon-intensive goods, including steel entering the EU, must confirm that a price has been paid for the embedded carbon emissions generated in the production. This necessitates the extension

of the emission trading market in China to cover CBAM-affected products, ensuring that carbon prices paid by Chinese steelmakers remain within the country. Currently, only the electricity sector is included in emission trading markets, but expansion into other sectors is underway as part of efforts to address CBAM.

We are pleased to see recent developments and announcements laying the groundwork for these initiatives. For instance, according to an article by [Bloomberg](#), the Ministry of Ecology and Environment, responsible for emissions permit trading, has requested feedback on draft plans aimed at addressing permit overallocation and setting limits on carryover volumes for the following year, paving the way for new sector entrance. Additionally, starting from May 1, listed companies in China are required to [disclose climate impact data](#) aligning with international mainstream climate disclosure frameworks. While this disclosure requirement is only applicable to listed companies, non-listed steel companies are also asked to start [reporting corporate carbon emissions and monthly records](#) in the latter half of this year according to Mr. Lu Shize, Deputy Director of the Climate Change Department of the Ministry of Ecology and Environment, at the "15th High-Quality Development Conference for Steel Industry in 2024" event. The disclosure requirement and the requirement to record carbon emissions signal preparation for the expansion of the emission trading markets into other high emitting sectors, such as iron and steel. We anticipate that these regulatory changes will further incentivise companies to adopt low-carbon steel practices.

The steel sector continues to focus on the blast furnace as a "demonstration project"

Investment in new technologies for low-carbon steel production requires significant capital investment. Additionally, support is needed for green electricity supply, green raw material supply, talent acquisition and process adjustments to make this transition a reality.

Similar to other countries like Japan, China is primarily focusing on the steel sector's blast furnace-basic oxygen furnace (BF-BOF) process as indicated by the list of [Green and Low-Carbon Advanced Technology Demonstration Projects \(First Batch\)](#) issued by NDRC. The first batch of demonstrative projects listed are specifically selected by NDRC and according to [the announcement](#), various government departments and agencies are encouraged to provide administrative support and also encourage financial institutions to increase financing support for these projects. Therefore these projects will be considered as "government-endorsed" models. However, we have noticed that the first batch list includes projects that focus on blast furnaces for the steel sector, with no mention of transformative technologies like electric arc furnaces (EAFs) or hydrogen-direct reduced iron (H₂-DRI). We suggest that China consider investing in EAF and H₂-DRI technologies, which have the potential to achieve significant carbon reductions. Embracing these technologies could lead to more sustainable practices in the steel industry, aligning with the national goal of carbon neutrality.