

ADVANCES IN CHINA'S ETS

THE CHINESE GOVERNMENT FORMALLY LAUNCHED ITS NATIONAL EMISSIONS TRADING SYSTEM AT THE END OF 2017. ZHANG XIN PROVIDES AN UPDATE ON WHAT WILL BE THE

1. WORLD'S LARGEST CARBON MARKET

THE ESTABLISHMENT of a national emission trading scheme (ETS) is one of the most significant aspects of climate change strategy in China. The government has pledged to reduce emission intensity by 60-65% in 2030, compared with 2005. To achieve this, China's government started to design its ETS in 2014.

The Chinese ETS has potential force to enhance ambitious international cooperation on climate change; it is not only an innovative instrument to control GHG emissions. The ETS is a market-based mechanism which caps emissions and also prioritises industrial restructuring, improves energy efficiency, optimises the energy structure and increases carbon sinks. Furthermore, the Chinese national ETS could send an important signal and incentivise other countries to implement emissions trading.

On 19 December 2017, Zhang Yong, Deputy Director of the National Development and Reform Commission (NDRC), hailed the dawn of the Chinese ETS in Beijing. Afterward, the NDRC published the China Emission Trading System Construction Plan.

The launch of China's ETS is a milestone for climate change policy and low-carbon development

According to the construction plan, the government will establish three main institutions and four technical systems to serve the ETS. The institutions will oversee emissions monitoring, reporting and verification (MRV), allowance allocation and management, and trading management and supervision. The four technical systems will be for emissions reporting, a registry system, an exchange and a trading settlement system.

CREATING THE INSTITUTIONAL ARCHITECTURE

China has been preparing for its ETS for several years. Since 2011, the NDRC has been working on MRV guidance, underpinned by uniformity, comparability, accuracy, completeness and operability. Guidance on emissions accounting and reporting for 24 industry sectors currently available was developed and published by the NDRC from 2013 to 2015. Moreover, the NDRC has asked key emitters to monitor their emissions so as to improve the quality of emissions accounting. Both the NDRC guidance and monitoring plans have been further revised and improved over time.

Meanwhile, the NDRC in 2016 issued its guidance on emissions verification, including a reference guide for administration. The provincial DRCs are in charge of emissions verification.

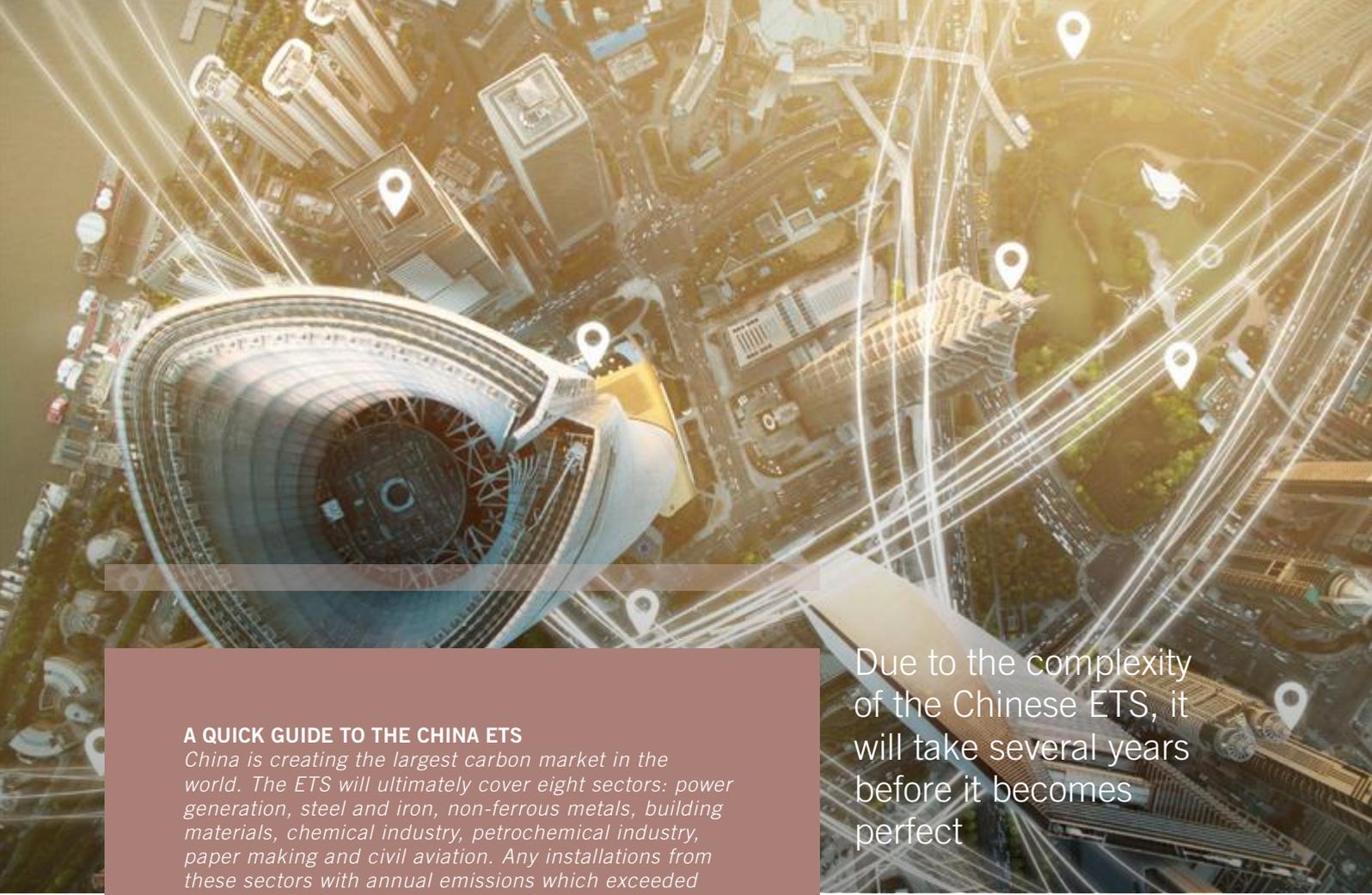
The Principle Plan of Cap Setting and Allowance Allocation was approved by the State Department in 2016. This plan requires that cap setting and allowance allocation should take into account fairness

and efficiency, technicality and operability as well as cost and effect. In order to avoid an allowance surplus and ensure emissions reductions, the cap setting and allowance allocation should be rigorous.

Benchmarking and historic emission intensity data are expected to be used, but mainly the former. Indeed, benchmarking is being used to allocate allowances for the power sector; a total of 11 benchmarks have been developed, depending on capacity.

At present, the allowances will be largely distributed for free. When the market matures, auctions will be considered. The allowance allocation is managed by both the NDRC and provincial DRCs. The NDRC is responsible for setting caps, developing allocation methods, and supervising the allowance allocation while the provincial DRC allocates the allowances and is in charge of compliance.

NDRC has focused on legislation and regulation in preparation for the national ETS, issuing temporary regulation for ETS management in 2014, and it has submitted the Emission Trading Management Rule to the state department to formalise this. The legislation and regulation system is constructed as "1+3" mode: "1" refers to the Emission Trading Management Rule, and "3" to forthcoming NDRC regulations for emissions reporting, emissions verification and a carbon trading. In addition, a series of regulations on allowance allocation, registry system, exchange system, and compliance management will be developed as well.



A QUICK GUIDE TO THE CHINA ETS

China is creating the largest carbon market in the world. The ETS will ultimately cover eight sectors: power generation, steel and iron, non-ferrous metals, building materials, chemical industry, petrochemical industry, paper making and civil aviation. Any installations from these sectors with annual emissions which exceeded 26,000 tCO₂ from 2013-15 will be covered.

However, the China ETS initially covers only power generation as it is considered to be the most advanced sector and has the most data available. It is estimated that the ETS will cover nearly 1,700 power plants, accounting for more than 3 billion tCO₂ per year; by comparison, the EU ETS covers around 2 billion tonnes. As the ETS matures, more emissions will be covered as the other sectors join the market gradually.

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As for the technical systems, Hubei's provincial government is leading the construction and operation of a registry system. The Shanghai municipality government is leading on the exchange system and its back up server for emissions trading. As leading unit is in charge of construction and operation of the exchange system. Two joint institutions, composed of Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangdong, Shenzhen, Jiangsu and Fujian governments, will manage the operation of the registry and exchange system.

THE FUTURE

Due to the complexity of the Chinese ETS, it will take several years before it becomes perfect and effective in controlling GHG

emissions. This is why it is being built step-by-step and not in haste. It will be built in three stages, starting with one year for the fundamental stage, in which the three institutions and four technical systems will be established.

In the second stage, the simulation run and also lasting around one year, allowances will be allocated to key emitters in the power generation sector. The systems and regulations will be tested to further improve their operability and effect. The third stage is the deepening and improving stage. During this phase, the key emission entities are required to achieve compliance and emissions trading is expected. Offsets may be introduced into the ETS as it develops.

The launch of China's ETS is a milestone for climate change policy and low-carbon development in China. The ETS will help China achieve its Nationally Determined Contribution for the Paris Agreement. Chinese enterprises have begun to see the ETS as an instrument to help drive an economic transition and low-carbon development. The ETS is one of many policy instruments for China to mitigate its carbon emissions, and the country will further improve its market over time and continue to explore other tools to achieve its climate, energy and environmental goals.

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