CARBON TRADING IN CHINA: RELAUNCH OF THE CERTIFIED EMISSION REDUCTION SCHEME

On 22 January 2024, China¹ officially relaunched the China Certified Emission Reduction (CCER) scheme, which is a milestone step in establishing the voluntary carbon market in China (the National CCER Scheme). The framework of the voluntary standard applicable under this scheme is similar to other internationally recognised voluntary standards (such as Verra and Gold Standard), whilst the implementation details are subject to PRC specific regulatory requirements.

This development is critical as it also impacts China's national Emissions Trading System (ETS) (the National ETS Market), which is the mandatory carbon market in China. This is because the "key emitters" under the National ETS Market, are allowed to surrender (a) their acquired CCERs together with (b) their allocated or acquired certified emission allowance for their actual carbon emissions under the National ETS Market, so the launch of the National CCER Scheme will provide key emitters with additional methods to offset their carbon emissions.

This briefing covers: (a) an overview of the mandatory and voluntary carbon market in China with a focus on the regulatory framework in relation to the National CCER Scheme, (b) the challenges for international investors in navigating the China carbon market access schemes and (c) the key considerations when structuring carbon trades having a PRC nexus.

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¹ "PRC" or "China", stands for the People's Republic of China, which for the purpose of this briefing, excludes Hong Kong, Macau or Taiwan.
OVERVIEW OF THE CARBON MARKET IN CHINA

Evolution of Mandatory and Voluntary Carbon Markets

Mandatory Carbon Market

In 2011, China began to launch carbon emissions trading through pilot schemes in regional markets. Over the years, various regional carbon emission exchanges have been established to facilitate regional carbon trading activities. Cross-market trading between regions at the time was not feasible – the covered industries and the covered products of each exchange were tailored to reflect regional practice where applicable (i.e., local versions of certified emission allowances (CEAs) and CCERs were traded on the regional market) and varied from each other.

The preparatory work to establish the National ETS Market (i.e., the mandatory carbon market) started in 2017 and the National ETS Market was formally launched in 2021. Shanghai Environment and Energy Exchange was designated as the trading venue of the National ETS Market whilst Hubei Emission Exchange was designated as the registrar of CEAs.

In February 2024, the State Council issued the first State Council level legislation in respect of the National ETS Market, the Interim Administrative Regulations on Carbon Emission Trading (2024) (the ETS Regulations), which will take effect on 1 May 2024. Currently, the regional markets and the National ETS Market still operate in parallel. However, the national market will be required to upgrade their rules to align with the ETS Regulations, and where products are tradable in the National ETS Market, the Key Emitters (as defined below) will no longer be permitted to trade the same product in the regional markets. Other market participants may still trade the same product in the regional markets.

Under the ETS Regulations, key emitters in designated sectors in China (the Key Emitters), such as power generation, iron and steel, non-ferrous metals, chemicals, petrochemical, construction materials, paper and aviation, are required to manage their actual carbon emissions to fall within the aggregate of (a) the annual CEAs allocated to them as notified by regulators (the CEA Quota), (b) the CEAs acquired from external parties (where applicable) and (c) the CCERs acquired from external parties (where applicable).

As a result:

(a) if a Key Emitter’s actual carbon emissions exceed the allocated CEA Quota (the Exceeding Portion), it may acquire (i) CEAs that correspond to the Exceeding Portion and/or (ii) CCERs to offset a small portion of the carbon emissions to fulfil its compliance obligation; and

(b) if a Key Emitter’s actual carbon emissions are less than the allocated CEA Quota (the Surplus Portion), it may sell the CEAs that correspond to the Surplus Portion for profit or reserve such Surplus Portion for fulfilling its compliance obligation in the following year.

Regional markets

Beijing: China Beijing Green Exchange
Shanghai: Shanghai Environment and Energy Exchange
Tianjin: Tianjin Climate Exchange
Chongqing: Chongqing Carbon Emissions Trading Center
Hubei: Hubei Carbon Emission Exchange
Guangdong: Guangzhou Emission Exchange
Shenzhen: Shenzhen Emission Exchange
Sichuan: Sichuan United Environment Exchange
Fujian: Haixia Equity Exchange

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2 In 2021, China Carbon Emissions Registration and Clearing Co., Ltd. was incorporated in Hubei, which now acts as the registrar for the National ETS Market.

3 The key product traded in the mandatory carbon market is the CEA and the primary key participants in the mandatory carbon market are power generation companies. The subsidiary rules that will govern participation in the mandatory carbon market by Key Emitters in other designated sectors will be developed in the future.
The list of the Key Emitters and the CEA Quota allocated to each Key Emitter is refreshed on an annual basis by provincial regulators.

**Voluntary Carbon Market**

The voluntary carbon credit market was first introduced in 2012 but has been less active in recent years, primarily due to a lack of tradable CCERs given that China ceased to approve projects that can generate CCERs in 2017. More recently, China has been mobilising resources nationwide to achieve its peak carbon emissions and carbon neutrality goals. As a result, on 19 October 2023, the long-waited *Administrative Measures on Voluntary Greenhouse Gas Emission Reduction Transaction (Trial Implementation) (2023)* (the CCER Measures) have been issued, which re-launch the framework of the National CCER Scheme. The China Beijing Green Exchange has been designated as the trading venue under the National CCER Scheme. The National Center for Climate Change Strategy and International Cooperation (NCSC), an institution subordinated to the Ministry of Ecology and Environment (MEE), was designated as the registrar under the National CCER Scheme (the CCER Registry).

**Interaction between Mandatory and Voluntary Carbon Markets**

As elaborated above, the option for CCERs to be used to satisfy compliance obligations under the ETS market creates a significant link between the voluntary carbon market and the mandatory carbon market in the PRC with the result that the demand for CCERs is likely to be enhanced by participation of Key Emitters.

Notably, unlike the mandatory carbon market whereby the "generation" and allocation of the CEAs are government-led and will be subject to an annual "cap" at the nationwide level, the voluntary carbon market provides the possibility for investors to participate in the development of emission reduction projects while trading the generated CCERs at the same time. The volume of tradable CCERs depends on the number of registered CCERs generated from the relevant projects, as opposed to being subject to a cap set out by the regulators.

**Key Features of the National CCER Scheme and the National ETS Market**

It should be noted that the National ETS Market and the National CCER Scheme are not underpinned by PRC statute. Instead, the evolving legal and regulatory landscape of carbon trading in China has been progressively developed by various administrative regulations and measures issued by competent regulators from time to time.

This table summarises the key features of the National CCER Scheme and the National ETS Market.

<table>
<thead>
<tr>
<th>Key Features</th>
<th>National ETS Market (Mandatory Market)</th>
<th>National CCER Scheme (Voluntary Market)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Participants</td>
<td>Trading entities include Key Emitters and other qualified entities</td>
<td>• PRC-domiciled legal persons and institutions may apply for the registration of Qualifying GHG Projects (as defined below) and CCERs</td>
</tr>
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</table>
CARBON TRADING IN CHINA: RELAUNCH OF THE CERTIFIED EMISSION REDUCTION SCHEME

Key Features

National ETS Market (Mandatory Market)

National CCER Scheme (Voluntary Market)

Trading entities include other qualified legal persons, institutions and individuals

Eligible Products

CEAs and other spot trading products approved by the government. CCERs and other products determined by MEE

Registry

China Carbon Emissions Registration and Clearing Co., Ltd.

NCSC

Trading and Settlement Venue

Shanghai Environment and Energy Exchange

China Beijing Green Exchange

Structure of National CCER Scheme

Since October 2023, various regulations and measures have been issued to guide the re-launch of the National CCER Scheme. This table sets out the implementation phases and the corresponding regulatory guidance.

<table>
<thead>
<tr>
<th>Phases</th>
<th>Covered Steps</th>
<th>Key Regulation/Measures</th>
</tr>
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</table>
| Qualifying GHG Project Registration | • Project developers to prepare project design documents based on selected CCER Methodology Booklet.  
• Project developer to publicise the project design documents through the CCER Registry and consulting public comments for twenty (20) working days. | • CCER Measures  
• CCER Methodology Booklet  
• CCER Registration Rules  
• Qualifying GHG Projects Implementation Guidelines  
• CCER Verification Rules |

4 These regulations and measures include:

(i) The CCER Measures.

(ii) On 24 October 2023, MEE issued several methodology booklets in relation to the voluntary greenhouse gas emission reduction projects that are eligible for issuing CCERs in accordance with the CCER Measures (the Qualifying GHG Projects), covering forestry carbon sink projects, grid-connected photothermal power projects, grid-connected offshore wind power projects and mangrove creation projects (each as a CCER Methodology Booklet).


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<tr>
<td></td>
<td>• Project developer to engage a licensed verification institution (the <strong>Verification Institution</strong>) to review the project design documents, which will issue a project review report.</td>
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<tr>
<td></td>
<td>• Project developer to apply for the registration of the relevant Qualifying GHG Project with the CCER Registry and the CCER Registry to consider whether to approve the registration within fifteen (15) working days upon receipt of application documents.</td>
<td></td>
</tr>
<tr>
<td>CCER</td>
<td>• Project developer to implement the registered Qualifying GHG Project, monitor the process, verify and calculate the CCERs proposed to be registered.</td>
<td>• CCER Measures</td>
</tr>
<tr>
<td>Registration</td>
<td>• Project developer to publicise the CCER verification and calculation report through the CCER Registry and consult the public for twenty (20) working days.</td>
<td>• CCER Registration Rules</td>
</tr>
<tr>
<td></td>
<td>• Project developer to engage another Verification Institution to review the CCER verification and calculation report, which will issue a CCER review report.</td>
<td>• Qualifying GHG Projects Implementation Guidelines</td>
</tr>
<tr>
<td></td>
<td>• Project developer to apply for the registration of CCERs with the CCER Registry and the CCER Registry to consider whether to approve the registration within fifteen (15) working days upon receipt of application documents.</td>
<td>• CCER Verification Rules</td>
</tr>
</tbody>
</table>
Phases | Covered Steps | Key Regulation/Measures
--- | --- | ---
Trading and Settlement of CCERs | • Eligible trading participants to open accounts with the CCER Registry and the CCER trading system.  
• Eligible trading participants to trade CCERs by way of listing agreements, block agreements, one-way auctions and other recognised trading methods in accordance with the relevant business rules. | • CCER Measures  
• CCER Registration Rules  
• CCER Trading and Settlement Rules

Project and CCER Cancellation | • Upon the expiry of the life span of a Qualifying GHG Project, project developer may apply for cancellation of such project.  
• CCERs used for compliance with CEA obligations and offsetting the emission of greenhouse gas of enterprises must be cancelled in the CCER Registry. There is no express restriction on use of CCERs for voluntary offsetting purposes. | • CCER Measures  
• CCER Registration Rules  
• CCER Trading and Settlement Rules

ISSUES TO CONSIDER IN NAVIGATING THE SCHEMES

Trading Access for Foreign Entities

The current PRC regulatory framework has not expressly provided a feasible route for institutions domiciled outside the PRC to be a direct participant trading in the National ETS Market or under the National CCER Scheme (i.e., being a direct account holder on the relevant trading venue or the registrar). As elaborated above, both of the ETS Regulations and the CCER Measures provide flexibility for "other qualified entities" to be included as eligible trading participants, and the competent regulators are expressly required to formulate the cross-border trading rules. However, under the current regulatory regime, international investors that wish to trade in the National ETS Market or under the National CCER Scheme will need to trade through an entity domiciled in China, subject to the satisfaction of the relevant eligibility requirements as set out by trading centers/registries.

It is noted that PRC regulators are aware of the importance of internationalisation of carbon products and will likely address this issue in the future. This is expressly reflected (i) in article 3 of the ETS Regulations which
points out that the State will enhance international collaboration in the National ETS Market; and (ii) in article 29 of the CCER Measures, which provides that MEE will, together with the relevant authorities, formulate the rules that apply to trading and using CCER on a cross-border basis.

In addition, international investors may consider or continue trading in certain regional markets which provide (a) a feasible route for eligible international investors to be a direct participant, including carbon emissions exchanges in Guangzhou, Shenzhen and Hubei, and (b) favourable treatment in remitting cash into and outside of the PRC in connection with the relevant regional carbon emissions trading. However, as there are no express rules facilitating cross-market trading, whether and how the purchase and sale of CCERs under the National CCER Scheme interact with regional markets and/or other internationally recognised schemes is not clear.

Notably, the People’s Bank of China (PBOC) has demonstrated its support in facilitating cross-border cash remittance in connection with foreign entities’ participation in PRC carbon emission trading activities without imposing any express and specific foreign exchange control measures in this regard. We expect that a similar approach to foreign exchange formalities will likely be adopted in relation to cross-border cash remittance in connection with CCER trading activities in the future.

Futures and Derivatives over Carbon Products

In the futures and derivatives market, one of the most significant developments has been the establishment of the Guangzhou Futures Exchange, which is the venue to trade carbon futures products that have been developed and approved by the China Securities Regulatory Commission (CSRC). In late 2023, the National Association of Financial Market Institutional Investors (NAFMII) also issued the China Carbon Derivatives Trading Definitions for market participants to consider and use in China carbon derivatives trades. As there are available schemes permitting international investors to access the China futures and derivatives market directly, these developments provide international investors further options in gaining exposure to China carbon markets.

KEY CONSIDERATIONS FOR INTERNATIONAL INVESTORS

Market participants should consider various issues when structuring carbon transactions that have a PRC nexus:

(a) **Uncertainty in Legal Nature of CEA and CCER.** The legal nature of CEA and CCER are not currently addressed specifically under statutes in China, a key issue experienced in many other international carbon trading markets. Whilst it is recognised under certain judicial precedents that CEs are recognised as “valuable assets” and in practice, there are PRC banks accepting CEA as collateral for a commercial loan, as neither CEA nor CCER is formally recognised as property under the PRC Civil Code (2020), it remains to be clarified by regulators on whether pledge registration at the exchange level is

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5. It is not clear at the moment whether the underlying scheme for such carbon futures products is CEA or CCER.
sufficient for the purposes of perfecting security interest under PRC law and how this affects the validity and enforceability of a contract under PRC law.

Currently, the trading, clearing and settlement rules of CEAs/CCERs are similar to the set-up provided for futures trades on exchanges. However, in light of uncertainties in the legal nature of CEAs/CCERs, whether there is settlement finality and the issue of potential bankruptcy of a PRC counterparty are issues to be considered when structuring the transactions.

(b) *Complexity of the Regulatory Framework.* In China, the regulatory framework governing carbon trading is developing and may evolve significantly over time. Depending on the specifics of different business models, how to design suitable risk mitigants in order to manage such regulatory uncertainties requires careful consideration. For example, investors that step in at the project development phase (*i.e.*, acting as or partnering with a project developer) will need to consider setting up a set of milestone events to manage the risks throughout the project lifespan, including risks specific to different counterparties involved and the types of transaction to be carried out. If institutions want to trade financial products with CEAs or CCERs as the underlying product, they should also consider the implications of regulatory rules governing the relevant financial products.

(c) *Challenges in Managing Cross-Departmental Supervisory Requirements.*

The ETS Regulations set out a cross-departmental regulatory cooperative system to be applied to the National ETS Market, with:

(i) MEE leading the management and supervision of carbon emission trading;

(ii) MEE, SAMR, PBOC, and the National Financial Regulatory Administration (*NFRA*) providing support in respect of supervision, information and enforcement; and

(iii) MEE and the National Development and Reform Commission (*NDRC*) formulating the greenhouse gases and industries covered by CEA trading for the State Council’s approval.

The CCER Measures have only clarified the supervisory responsibilities of the issuing regulators of these measures, with:

(i) MEE leading the management and supervision of voluntary greenhouse emission trading; and

(ii) SAMR supervising and managing the Verification Institutions.

As to whether PBOC, NFRA and NDRC will also be assuming similar responsibilities in the supervision and management of the National CCER Scheme, and whether there are other regulators to be included, will both need to be further clarified by the State Council.

As the regulatory framework is developing, the regulators involved and their respective responsibilities may evolve over time, and market participants will need to carefully consider their compliance strategy. When engaging with highly regulated counterparties, such as securities firms approved by CSRC to trade CEAs using proprietary funds, the regulatory requirements affecting the counterparty may also impact the
trading documentation. For futures and derivatives transactions involving CEA or CCERs, whether and how the relevant financial regulators and MEE will cooperate and supervise these trading activities also remains to be seen.

OUTLOOK

It is expected that the PRC government will continue to issue secondary rules and industry guidance to further refine the regulatory framework governing carbon trading in China. In light of the complexity involved in the chain of carbon trading transactions, companies that trade or want to trade carbon in China must prepare to set up a system to monitor the carbon trading regulatory framework on a regular ongoing basis and structure carbon trading transactions to cater for the potential changes and uncertainties in the regulatory landscape.
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