China National ETS

General Information

Summary

**Status:** ETS under development

**Jurisdictions:** China

Building on its experience of successfully piloting carbon markets in seven regions, China launched its national ETS politically in December 2017. This launch was a goal set in 2015 at China’s highest political level, which was reaffirmed by its NDC under the Paris Agreement and the ‘13th Five-Year Work Plan for Greenhouse Gas Emission Control.’

The provisions for the launch and incremental development of the ETS are laid out in the Work Plan for Construction of the National Emissions Trading System (Power Sector) (Work Plan), approved by the State Council in late 2017.

The objective of the ETS is to contribute to the effective control and gradual reduction of carbon emissions in China and the achievement of green and low carbon development. The ETS is expected to regulate ~1,700 companies from the power sector (including combined heat and power, as well as captive power plants of other sectors), which emit more than 26,000 tonnes GHG or consume more than 10,000 tce per year. The Chinese system would cover more than three billion tonnes of CO2e in its initial phase, accounting for about 30% of national emissions. The scope is to be further expanded in the future.

The Work Plan foresees a three-phase roadmap for the development of the ETS:

- **First Phase:** will focus on the development of market infrastructures (roughly one year);
- **Second Phase:** foresees simulation trading (roughly another year); and
- **Third Phase:** will be the deepening and expanding phase with allowances spot trading for compliance purposes (roughly starting from 2020).

A gradual transition of the Chinese pilots is foreseen by the Work Plan. In the short term, the existing ETS pilots are expected to operate in parallel to the national market, covering the non-power sectors. Over the medium to long term, they are expected to be integrated into the national market once it is fully operational.

Year in Review

2019 saw the final stages of the transition of ETS-related responsibilities from the National Development and Reform Commission (NDRC) to the newly created Ministry for Ecology and Environment (MEE), particularly at the provisional level.

In addition, the government continued to advance the work on reporting and verification of the 2018 emissions data from eight emission-intensive sectors of the economy.

MEE also continued to improve the establishment of plans for a national registry and a trading system, as well as the development of a national enterprise GHG direct reporting system. In March, the MEE published a draft of the ‘Interim Regulation on Carbon
Emission Trading’ for public consultation, marking progress towards the adoption of ETS implementing legislation.

In 2019, MEE also conducted a China-ETS Allowance Allocation and Management Training Series in more than 15 cities. The aim of the training was to enhance the capacity and readiness of various stakeholders for the national ETS. Further, MEE released the information regarding the allocation plan through the ‘Implementation plan of carbon emission allowance allocation for key emitters in power generation industry (including captive power plant and co-generation) in 2019 (trial version).’ The training plan was used in capacity-building activities and further tested the rationality and operability of the benchmarks for the power sector.

Looking to the future, the main tasks of national ETS development are legislating national ETS regulations, accelerating the development of market infrastructure, promoting reporting, carrying out verification and carbon management for key enterprises, and strengthening capacity-building activities. The simulation trading in the power sector is expected to start in 2020.

In May 2020, the expert review meeting on the construction plan of the nationwide ETS registry system and trading platform was held in Beijing by the Ministry of Ecology and Environment. Experts received reports from Hubei and Shanghai, charged with building the registry and trading platform respectively, and put forward suggestions for consideration. The construction plan will be further improved and implemented.

On 2 November 2020, the General Office of the Ministry of Ecology and Environment (MEE) issued two policy documents on the national ETS establishing regulatory authority and specifying general rules for key areas of market operation and design. The two documents, entitled “The National Measures for the Administration of Carbon Emission Trading (Trial),” hereafter the National Measures, and “The Administrative Measures for the Registration, Trading, and Settlement of the National Carbon Emission Rights (Trial)” are now under public consultation. The National Measures aim to provide the legal basis for the upcoming national system and supersede interim measures published in 2014. In December 2014, the National Development and Reform Commission (NDRC), the former national competent authority for climate change, had issued the Interim Measures for the Administration of Carbon Emissions Trading (NDRC Order No. 17) to regulate the construction of carbon markets in China. With the re-assignment of climate change responsibilities to the MEE in 2018, the newly drafted National Measures represent an update to adapt to the latest thinking and pathways toward a national ETS. MEE has made it clear that the National Measures are to be issued in the form of departmental regulation, which is subject to future review and revision. This level of regulation is lower in the legal hierarchy compared to the State Council regulation, with implications for the level of financial fines it could impose.

The National Measures include general rules and provisions related to allowance management; emissions trading; monitoring, reporting, and verification; compliance; offsets; supervision and management; and accountability. The second document, the Administrative Measures for Registration, Trading, and Settlement, is issued in the form of a regulatory document of the MEE, one level lower in the legal and regulatory hierarchy of the National Measures. Composed of six chapters and 38 articles, it applies to allowances rather than offset credits, clarifying the basic elements and oversight system of emission allowance registration, trading, and settlement, as well as the functions of the responsible agencies. The release was complemented by three ancillary documents: the "Registration Management Rules", "Transaction Management Rules", and "Settlement Management Rules". Specific rules on other key ETS design elements such as cap setting, allowance allocation, and market stability measures will be released as additional technical rules and guidelines.

Overall GHG emissions (excluding LULUCF)  

Emissions: 10,976 MtCO2e (2012)

<table>
<thead>
<tr>
<th>Overall GHG emissions by sector</th>
<th>Sector Name</th>
<th>MtCO2e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>7,946.9</td>
<td></td>
</tr>
<tr>
<td>Industrial Processes</td>
<td>1,296.6</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>831.6</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>702.9</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>197.6</td>
<td></td>
</tr>
</tbody>
</table>

Overall GHG reduction target  

2016-2020: Reduction in carbon emissions per unit GDP by 18% compared to 2015 level (13th FYP)
BY 2020: 40-45% reductions in carbon intensity compared to 2005 levels (voluntary commitment under the Copenhagen Accord of 2009)

BY 2030: Peak CO2 emissions around 2030, with best efforts to peak earlier; China also has committed to lowering CO2 emissions per unit of GDP by 60-65% from 2005 levels (NDC)

Carbon Price

Current Allowance Price (per t/CO2e): No information available yet.

ETS Size

| Emissions covered by the ETS | 0.30 |
| GHG covered | CO2 |
| Sectors covered and thresholds | Power sector (including combined heat and power, as well as captive power plants of other sectors).

The scope is expected to be gradually expanded to finally cover a total of eight sectors: petrochemical, chemical, building materials, steel, nonferrous metals, paper, and domestic aviation. There is no specific timeline for this expansion.

INCLUSION THRESHOLDS: Entities with annual emissions of ~26,000 tCO2 (energy consumption of more than 10,000 tce) in any year over the period 2013-2015.

| Point of regulation | Downstream. |
| Number of liable entities | ~1,700 |

No information available yet.

| Cap | ~3,300 MtCO2e/year |

Phases & Allocation

| Trading period | First Phase (~a year as of 2018): Development of market infrastructures |
| Second Phase (~another year as of 2019): Simulation trading |
| Third Phase (~from 2020 on): Expanding sectoral coverage and deepening and expanding the system |

Allocation

The ETS competent authority will develop detailed allocation rules in cooperation with energy sector authorities.

Free Allocation: Free allocation is expected to be based on subsector benchmarks with ex-post adjustments for changes in actual production.

In 2017, draft allocation plans for power, cement, and electrolytic aluminum were developed and trial allocation work was carried out in two provinces. In 2019, MEE released the ‘Implementation plan of carbon emission allowance allocation for key emitters in power generation industry (including captive power plant and co-generation) in 2019 (trial version),’ which provided further information on the approach to benchmarks for the power sector.
Flexibility

Banking and borrowing

Expected to allow banking across compliance phases, but not to allow borrowing.

Offsets and credits

The use of China Certified Emissions Reduction (CCER) credits is expected to be allowed during the third phase.

In 2012, the NDRC issued the ‘Interim Measures for the Management of Voluntary GHG Emission Reduction Transactions’ ("Interim Measures"). These measures include guidelines for the issuance of CCERs. The acceptance of CCERs is expected to be regulated through a revision of the Interim Measures and through the development of an ‘Administration Measure of Offset Scheme for National ETS’ focusing on the quality of and limits on the use of CCERs in the ETS. Specific timelines and detailed rules are yet to be published.

Market Stability Provisions

Adjustment mechanisms to prevent abnormal price fluctuations, as well as risk prevention and control mechanism to prevent market manipulations, are to be developed.

Compliance

Compliance Period

One year

Monitoring, Reporting, Verification (MRV)

REPORTING FREQUENCY: Annual reporting of emissions to be submitted within a given timeline.

VERIFICATION: Emissions must be verified by a third-party verifier.

FRAMEWORK: MRV guidelines, supplementary data sheets, verification guidelines, and other guidance are available for the eight sectors expected to be covered by the ETS.

From 2013 to 2015, the NDRC released a series of MRV guidelines covering a total of 24 sectors. Supplementary MRV data sheets for the eight sectors expected to be covered under the national ETS, as well as ‘Reference Guidance on Third-party Verification of China ETS’ and ‘Reference Qualification on Third-party Verification Body and Verifiers of China ETS,’ were all released in 2016. In 2017, new requirements on data collection, categorization, and verification were added.

OTHER: The MEE is taking efforts to develop the management measure for corporate emissions reports as well as improve the existing guidelines and technical specifications for the national ETS.

Enforcement

Noncompliance would result in punishment, which may include recording the noncompliance information in the national credibility information sharing platform*; although details are yet to be developed.

* The national credibility information sharing platform, developed in 2015, integrates credibility information provided by various departments and regions across the country. As of 2018, it has achieved interconnection with 44 ministries, 31 provinces and autonomous regions, and 65 market institutions.

Linking

Links with other Systems

At the initial phases of the ETS, the focus is on the domestic ETS construction (rather than linking with other systems). Once the national ETS is fully operational, China and other jurisdictions such as the EU and Korea may be interested in exploring linking opportunities.
### Institutions involved

The MEE, in cooperation with other relevant ministries, is responsible for policy design and rule-making for the national ETS.

Prior to 2019, provisional DRCs implemented the policies and rules set up by the central level in their respective regions. Post 2019, responsibilities for the ETS was moved to local Ecology and Environment Bureaus, which are the corresponding government institutions of the MEE at the regional level.

### Evaluation / ETS review

No information available yet.

### Revenue

No information available yet.

### Implementing Legislation

- [Work Plan for Construction of the National Emissions Trading System (Power Sector)](#)
- [Notice on Key Works in Preparation for the Launch of the National ETS](#)
- [Interim Administrative Measures on Emissions Trading](#)
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