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.

Overall GHG emissions (excluding LULUCF)  
**Emissions:** 10,976 MtCO$_2$e (2012)

<table>
<thead>
<tr>
<th>Overall GHG emissions by sector</th>
<th>Sector Name</th>
<th>MtCO$_2$e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td></td>
<td>7,946.9</td>
</tr>
<tr>
<td>Industrial Processes</td>
<td></td>
<td>1,296.6</td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td>831.6</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td>702.9</td>
</tr>
<tr>
<td>Waste</td>
<td></td>
<td>197.6</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. In the long run, both direct emissions from the power sector and indirect emissions from electricity (and heat) consumption are expected to be included. |
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.

<table>
<thead>
<tr>
<th>Enforcement</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*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.</td>
</tr>
</tbody>
</table>

### Linking

<table>
<thead>
<tr>
<th>Links with other Systems</th>
<th>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.</th>
</tr>
</thead>
</table>

### Other Information

<table>
<thead>
<tr>
<th>Institutions involved</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation / ETS review</td>
<td>No information available yet.</td>
</tr>
<tr>
<td>Revenue</td>
<td>No information available yet.</td>
</tr>
</tbody>
</table>
**Notice on Key Works in Preparation for the Launch of the National ETS**  
**24 Guidelines for GHG Monitoring and Reporting for various sectors** [2013, 2014 and 2015]  
**Interim Administrative Measures on Emissions Trading** |
Disclaimer

Copyright © 2019 by International Carbon Action Partnership (ICAP). All rights reserved. The content provided by the ICAP ETS map is protected by copyright. You are authorized to view, download, print and distribute the copyrighted content from this website subject to the following condition: Any reproduction, in full or in part, must credit the International Carbon Action Partnership (ICAP) must include a copyright notice. If you have any questions please contact info@icapcarbonaction.com. Developed and designed by Lucid.Berlin

In line with ICAP’s mandate, the ICAP ETS map exclusively covers cap-and-trade systems for greenhouse gas emissions. Information displayed on the map is regularly updated by ICAP Secretariat staff based on official and public information as far as possible and subject to annual peer review by government representatives from the covered systems. Although the information contained in the map is assembled with utmost care, ICAP cannot be held liable for the timeliness, correctness and completeness of the information provided.

Please refer to the imprint on the website of the International Carbon Action Partnership regarding links to external websites, liability and privacy policy.