

China

General Information

Summary

Status: ETS in force

Jurisdictions: China

Through a video conference call on 19 December 2017, including both national ministries and provincial governments, China launched its much-anticipated national ETS, which is now the world's largest carbon market. 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), (hereinafter referred to as the "Work Plan"), which was approved by the State Council late in 2017.

The ETS regulates around 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 tons GHG per year, or consume more than 10,000 tons of standard coal equivalent (tce) per year. The Chinese system covers more than three billion tons of CO₂e in its initial phases, accounting for about 30% of national emissions.

A three-phase roadmap has been adopted (Article 3, Work Plan). Phase one is on the development of market infrastructures (roughly one year); phase two foresees simulation trading (roughly another year); and phase three will be the deepening and expanding phase with allowances spot trading for compliance purposes (roughly starting from 2020).

Supplementary technical rules on MRV, allowance management, and market trading will be further developed (Article 10-12, Work Plan). So too will the market infrastructure and supporting systems (Article 15-18, Work Plan) e.g. national registry (led by Hubei) and trading platform (led by Shanghai). While detailed allocation rules are yet to be published, allowances are expected to be initially handed out for free based on sub-sector benchmarks with ex-post adjustments that reflect actual production volumes (based on the draft allocation methods for the trial allocation in 2017). Domestic offsets that have also been used by the ETS pilots, known as Chinese Certified Emission Reductions (CCERs), are also expected to be available in the national carbon market post-2020 (Article 3, Work Plan).

While a uniform rule will be in place for all provinces, provincial governments may be able to extend the scope of the ETS and apply stricter allocation methods within their regions (Article 2, Work Plan).

Under the oversight of the National Development and Reform Commission (NDRC), which will operate the national carbon market jointly with the provincial governments (Article 8, Work Plan), the Chinese carbon market is expected to see continuous improvement over the coming years, such as strengthening domestic capacity and improving data quality. The market will also gradually expand to cover additional sectors (Article 7, Work Plan).

This step-wise approach is also reflected by a notice by NDRC in December 2017 requiring all local DRCs to begin the MRV process for 2016 and 2017 emissions from eight sectors of the economy (including heat and power, petrochemical, chemical, building materials, steel, nonferrous metals, paper and aviation). The notice also includes new data collection, categorization and verification requirements. These sectors had previously submitted their historical data for 2013-2015 emissions.

	<p>The launch of China's national ETS in 2017 has been a goal set in 2015 at China's highest political level, which were reaffirmed by its Nationally Determined Contribution under the Paris Agreement, and the "13th Five-Year Work Plan for Greenhouse Gas Emission Control". Other key documents throughout the preparation phase are "Interim Administrative Measures on Emissions Trading" (December 2014), the 24 "Guidelines for GHG Monitoring and Reporting" for various sectors (2013, 2014, 2015), and the "Notice on Key Works in Preparation for the Launch of the National ETS" ('NDRC 2016 No. 57', January 2016).</p> <p>In 2018, there has been some institutional restructuring that affects the governance of the national ETS. On 17 March 2018, the first session of the 13th National People's Congress of China approved the plan to restructure the State Council, including the establishment of a new Ministry of Ecology and Environment (MEE) to replace the Ministry of Environmental Protection (MEP). In addition to environmental governance, the new ministry absorbs the climate change responsibilities previously under the National Development and Reform Commission (NDRC) and take charge of the development of the national ETS.</p> <p>National Development and Reform Commission (NDRC) (Chinese) Work Plan for Construction of the National Emissions Trading System (Power Sector) (NDRC) (Chinese) Interim Measures for Carbon Emissions Trading (NDRC) (Chinese) Activities of China under the Partnership for Market Readiness (PMR)</p> <p>China's Intended Nationally Determined Contribution (INDC)</p>												
Overall GHG emissions (excluding LULUCF)	Emissions: 10976 MtCO ₂ e (2012)												
Overall GHG emissions by sector	<table border="1"> <thead> <tr> <th>Sector Name</th> <th>MtCO₂e</th> </tr> </thead> <tbody> <tr> <td>Energy (excl. Transport)</td> <td>7946.9</td> </tr> <tr> <td>Industrial Processes</td> <td>1296.6</td> </tr> <tr> <td>Agriculture</td> <td>831.6</td> </tr> <tr> <td>Waste</td> <td>197.6</td> </tr> <tr> <td>Transportation</td> <td>702.9</td> </tr> </tbody> </table>	Sector Name	MtCO ₂ e	Energy (excl. Transport)	7946.9	Industrial Processes	1296.6	Agriculture	831.6	Waste	197.6	Transportation	702.9
Sector Name	MtCO ₂ e												
Energy (excl. Transport)	7946.9												
Industrial Processes	1296.6												
Agriculture	831.6												
Waste	197.6												
Transportation	702.9												
Overall GHG reduction target	<p>By 2020: 40-45% reductions in carbon intensity compared to 2005 levels (voluntary commitment under the Copenhagen Accord of 2009).</p> <p>Further detailed target for 2016-2020: reduction in carbon emissions per unit GDP by 18% compared to 2015 level (13th Five-year plan).</p> <p>By 2030: Peak CO₂ emissions around 2030, with best efforts to peak earlier. China has also committed to lowering CO₂ emissions per unit of GDP by 60-65% from 2005 levels and increasing the share of non-fossil fuels in primary energy consumption to around 20% (NDC of China).</p>												
Type of ETS	Mandatory												
Cap and trajectory	Type of Cap: ~3300 MtCO ₂ e/year												
Carbon Price	<i>Current Allowance Price (per t/CO₂e):</i> No information available yet.												

ETS Size

Emissions covered by the ETS	0.30
GHG covered	CO ₂
Sectors covered and thresholds	<p>Power sector (including combined heat and power as well as captive power plants of other sectors).</p> <p>Scope is expected to be gradually expanded to finally cover eight sectors including: petrochemical, chemical, building materials, steel, nonferrous metals, paper and aviation.</p>

	<p>Inclusion Thresholds: Entities with annual emissions of ~26,000 t/CO₂ (energy consumption of more than 10,000 tce) in any year over the period 2013–2015.</p>
Number of liable entities	<p>Approximately 1,700 entities</p> <p>No information available yet.</p>
Point of regulation	<p>Downstream</p> <p>In the Long Run: Mixed. Both direct emissions from the power sector and indirect emissions from electricity (and heat) consumption are expected to be included.</p>

Phases & Allocation

Compliance period	One year
Trading period	<p>Phase one (roughly a year): Development of market infrastructure</p> <p>Phase two (roughly another year): Simulation trading</p> <p>Phase three (roughly from 2020 on): Deepening and expanding</p> <p>The following trading periods are to be further defined.</p>
Allocation	<p>Detailed allocation rules are yet to be developed by NDRC in cooperation with energy sector authorities (Article 13, Work Plan). However, based on officially released documents during trial allocation, free allocation is expected based on sub-sector benchmarks with ex-post adjustments for changes in actual production.</p> <p>Based on the national cap setting and allocation framework approved by the State Council in December 2016, draft allocation plan for three sectors (power, cement and electrolytic aluminum) were developed and trial allocation work carried out in two provinces in May 2017, which will feed into the finalization of the allocation rules.</p>

Flexibility

Banking and borrowing	Expected to allow banking across compliance phases but not borrowing (Article 3, Work Plan).
Offsets and credits	<p>The use of CCER credits is expected to be allowed at certain time during the third phase (Article 3, Work Plan).</p> <p>In 2012, the NDRC issued the “Interim Measures for the Management of Voluntary GHG Emission Reduction Transactions”. These measures include guidelines for the issuance of domestically-produced offsets, known as CCER. They are expected to be used in national ETS with revision of the Interim Regulation and development of “Administration Measure of Offset Scheme for National ETS” (incoming), to regulate the quality and limit the use of CCER for compliance market. Specific timeline and detailed rules are yet to be published.</p>
Provisions for price management	NDRC in cooperation with other ministries are to develop adjustment mechanism to prevent abnormal price fluctuations as well as risk prevention and control mechanism to prevent market manipulations (Article 12, Work Plan).

Compliance

Monitoring, Reporting, Verification (MRV)	<p>Reporting Frequency: Annual</p> <p>The NDRC is currently drafting MRV regulations for the national ETS (Article 10, Work Plan). Before this is finalized, local DRCs are asked to select suitable institutions and personnel to carry out the verification tasks according to suggested requirements by the NDRC.</p> <p>Framework: From 2013-2015, the NDRC has released a series of MRV guidelines covering a total of 24 sectors. In 2015, the NDRC further provided supplementary data sheets on GHG MRV for the 8 ETS covered sectors 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”.</p> <p>In December 2017, NDRC published another notice, requiring all local DRCs to begin the MRV process for 2016 and 2017 emissions from eight sectors of the economy (power, petrochemical, chemical, building materials, steel, nonferrous metals, paper and aviation). The notice also includes new data collection, categorization and verification requirements.</p>
Enforcement	<p>Non-compliance will result in punishment (details are yet to be developed); relevant information will also be included in the national credibility information sharing platform (Article 11, Work Plan).</p>

Other Information

Institutions involved	<p>Ministry of Ecology and Environment (MEE) since Q2 of 2018 (previously National Development and Reform Commission (NDRC))</p> <p>Provincial/autonomous regional/municipal Development and Reform Commissions (DRCs)</p> <p>According to the Work Plan, overall, NDRC, in cooperation with other relevant ministries, is in charge of policy design and rule making while the local DRCs are in charge of policy and rule implementation (Article 8, Work Plan, 2017). In 2018 the climate change responsibilities including the development of national ETS has been shifted from NDRC to MEE.</p>
Linkage with other schemes	<p>No information available yet.</p>

Disclaimer

Copyright © 2012 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.