

China - Hubei pilot ETS

General Information

<p>Summary</p>	<p>Status: ETS in force</p> <p>Jurisdictions: Hubei</p> <p>Launched in April 2014, the Hubei Pilot ETS has since concluded six compliance years. Hubei has been one of the most active regional markets in China in terms of trading and has the second-largest market size in terms of spot trading volume, after Guangdong. It is also one of the regional pioneers for allowance spot forward trading in China. When spot forward trading is also considered, Hubei has the largest market share as of end 2020, with its total secondary market transaction volume of 347 million tonnes and value of CNY 8.13 billion (USD 1.18 billion). The system initially covered 138 of the most carbon-intensive companies in the province, accounting for ~35% of the province's total carbon emissions.</p> <p>Hubei has expanded its scope several times. In 2016, it lowered the thresholds of seven sectors from 60,000 to 10,000 tce. In 2017, it further lowered the thresholds of all the other sectors to 10,000 tce. In 2018, the water supply sector was added. As of 2020, the system covers more than 370 entities which accounts for ~42% of the province's carbon emissions.</p> <p>A government reserve with 8% of the total cap is available for market stabilization, and the government can also intervene in cases of market fluctuations, severe supply-demand imbalances, or for liquidity reasons. The Hubei ETS pilot is open to diversified market participants, including covered entities as well as institutional and individual (domestic and foreign) investors.</p> <p>According to the compliance notice by the Hubei Development and Reform Commission (DRC) in July 2017, the Hubei Pilot ETS will continue to run after the national ETS commences. The transition of Hubei allowances into the national ETS will be based on rules to be defined by the national competent authority.</p> <p>In December 2017, Hubei was selected to lead the development of the registry for the national ETS.</p> <p>In early 2019, the ETS-related responsibilities in Hubei completed the transition from DRC to the Department of Ecology and Environment (DEE) of Hubei, as a result of the governance restructuring across China.</p>
<p>Year in Review</p>	<p>The Hubei DEE released the 2019 allocation plan in August 2020. Key changes compared to the previous year's plan include: a cap increase of 14 million tonnes to reach 270 million tonnes; a decline in the market adjustment factor, which is a factor applied to all covered entities to reduce overall allocation; and updating of the base year from 2015-2017 to 2016-2018. In this plan, Hubei also clarifies how it plans to coordinate its ETS with the upcoming national ETS. According to the plan, if the national ETS had implemented 2019 compliance work, the overlapping companies would have no longer participated in Hubei's compliance and the regional government would have withdrawn the corresponding allowances issued. This cutoff date of September 2019 did not see the operationalization of the national ETS; hence, these entities were covered under the Hubei ETS for compliance year 2019.</p>

	The Hubei DEE moved the compliance deadline for 2019 emissions from May to December 2020 as a result of the COVID-19 pandemic. In December 2020, the Hubei pilot completed its 2019 compliance period with a 100% compliance rate.
Overall GHG emissions (excluding LULUCF)	Emissions: 463.1 MtCO ₂ e (2012)
Overall GHG emissions by sector (in MtCO ₂)	No information available yet.
GHG reduction target	BY 2020: 19.5% reduction in carbon intensity compared to 2015 levels (13th Five-Year Plan)
Carbon Price	<i>Current Allowance Price (per t/CO₂e):</i> CNY 27.21 (USD 3.94) (updated prices available here)

ETS Size

Covered emissions	0.42
GHGs covered	CO ₂
Sectors and thresholds	<p>16 sectors*: power and heat supply, iron and steel, nonferrous metals, petrochemicals, chemicals, textile, cement, glass and other building materials, pulp and paper, ceramics, automobile and equipment manufacturing, food, beverage, and medicine producers, and water supply.</p> <p>INCLUSION THRESHOLDS: Until 2015: Annual energy consumption more than 60,000 tce in any year between 2010 and 2011, applying to all energy and industrial sectors. From 2016 onwards: Annual energy consumption more than 10,000 tce in any year between 2016 and 2018, applying to all energy and industrial sectors.</p> <p>* Different from other Chinese pilots, Hubei does not pre-define which sectors are covered under its ETS; rather, it sets a threshold which applies to all power and industrial sectors. Those sectors with entities above the threshold then are covered.</p>
Point of regulation	<p>Downstream.</p> <p>Both direct and indirect emissions from electricity and heat consumption are covered.</p>
Number of entities	373 (2019)
Cap	270 MtCO ₂ (2019), which includes reserves for new entrants and market stability.

Phases & Allocation

Trading periods	<p>2014 and ongoing*</p> <p>*In the short term, the existing Chinese regional carbon markets are expected to operate parallel to the national Chinese carbon market. Over the medium to long term, they are expected to be integrated into the national market, once it is fully operational.</p>
Allocation	<p>FREE ALLOCATION, BENCHMARKING: Free allocation of 2019 vintage allowances through benchmarks for power and cement (except for entities using outsourced clinker).</p> <p>FREE ALLOCATION, GRANDPARENTING: Historical emissions intensity for heat, co-generation, glass and other building materials, some of the equipment manufacturing, and the pulp and papers sectors; grandparenting based on previous three years' historic emissions for all other sectors.</p>

Ex-post allocation adjustments are applied, especially for those sectors that use benchmarks and emissions intensity.

Hubei also introduces the so-called market adjustment factor, a factor that is applied to all covered entities to reduce overall allocation. It is determined based on the previous year's market stock of the Hubei carbon market, while taking the province's overall economic development and the achievement of its climate mitigation targets and strategies into consideration. For the 2019 compliance year, it was set at 0.9723.

AUCTIONING: A small share of the annual cap can be auctioned. The main purpose of auctions is to promote price discovery and provide regulated entities with additional supply to meet their compliance demand. To date, auctions have been held on an ad hoc basis and happened only in 2014, 2019, and 2020. The first auction took place in 2014, with two million allowances sold at the floor price of CNY 20 (USD 2.90).

In November 2019, through two separate auctions, five million allowances were made available from the government reserve. The auctions operated with a reserve price set at the weighted spot market price from 30 October 2017 to 30 October 2019. The first auction was restricted to compliance entities. Two million allowances were offered with 1.49 million sold at an average price of CNY 24.65 (USD 3.57). Remaining allowances were made available to covered entities as well as other market participants for a second auction. The total auction volume was 3.51 million tonnes, including 0.51 million that was left from the first auction. The average price was CNY 24.49 (USD 3.55).

Following an identical structure of two separate rounds of auctions targeting different types of entities, in December 2020 three million allowances were made available from the government reserve, with two-thirds dedicated to compliance entities only. The auctions operated with a reserve price set at CNY 27.56 (USD 3.99). 1.1 million and 671,000 tonnes were successfully auctioned respectively, with the average price of CNY 27.57 (USD 4.00).

Flexibility

Banking and borrowing	Banking is allowed, but only for allowances that were traded at least once. Borrowing is not allowed.
Offsets and credits	QUANTITATIVE LIMIT: The use of domestic project-based carbon offset credits (CCERs) is limited to 10% of the annual initial allocation for each entity. QUALITATIVE LIMIT: CCERs must come from rural biogas or forestry projects in the key counties under the national or provincial poverty alleviation plan in urban agglomeration areas of the middle reaches of the Yangtze River (within Hubei). CCERs must have been generated between 1 January 2013 and 31 December 2015.
Market Stability Provisions	RESERVE: 8% of the total cap is kept as a government reserve for market stabilization. INTERVENTION: In case of market fluctuations, severe imbalances between supply and demand, or liquidity issues, the Hubei EEB—in consultation with an advisory committee consisting of government institutions and other stakeholders—can buy or sell allowances in order to stabilize the market. Specifically, if the allowance price reaches a low or high point six times during a 20-day time span, the Hubei EEB takes action. EXCHANGE: The exchange limits day-to-day price fluctuations to between -10% and +10% respectively.

Compliance

Compliance Period	One year (1 January to 31 December): covered entities have until the last working day of May of the following year to surrender allowances.*
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	<p>* For the compliance year 2019, the deadline was postponed in 2020 due to the COVID-19 pandemic.</p>
Monitoring, Reporting, Verification (MRV)	<p>REPORTING FREQUENCY: Annual reporting of CO2 emissions.</p> <p>VERIFICATION: Third-party verification is required. Third-party verifiers may be involved in mutual evaluation of each other's verification reports. In addition, further validation is carried out by government-assigned experts to further enhance the accuracy; this process is also called "fourth-party verification" in China.</p> <p>FRAMEWORK: The Hubei government has released general rules on monitoring and reporting guiding all the sectors as well as sector-specific guidance for the following 11 sectors: power, glass, aluminum, calcium carbide, pulp and paper, automobile manufacturing, iron and steel, ferroalloys, ammonia, cement, and petroleum processing. The national-level guidelines on MRV, especially for the sectors outside these 11 sectors, are also used as reference for Hubei.</p>
Enforcement	<p>Hubei has introduced a capped mechanism for the compliance obligations. If the difference between the annual verified emissions and the allocated allowances of an entity exceeds either 20% of the allocation or 200,000 tonnes, the allowances will be added or deducted to cap the surplus or deficit within the 20%/200,000 tonnes limit.</p> <p>Penalties for failing to submit an emissions or verification report on time range from CNY 10,000 (USD 1,449) to CNY 30,000 (USD 4,347). Trade participants that manipulate the market face up to CNY 150,000 (USD 21,737) in fines. Furthermore, companies that fail to surrender enough allowances to match their emissions will be deducted twice the amount of allowances from next year's allocation and are fined one to three times the average market price for every allowance, with a maximum limit of CNY 150,000 (USD 21,737).</p>

Linking

Links with other systems	No information available yet.
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Other Information

Institutions involved	<p>Department of Ecology Environment of Hubei Province (competent authority) China Hubei Emission Exchange (trading platform and registry)</p>
Evaluation / ETS review	No information available yet.
Revenue	<p>Since beginning of program: CNY 212 million (USD 30.7 million)</p> <p>Collected in 2020: CNY 49.32 million (USD 7.15 million)</p> <p>No information available yet.</p>
Implementing Legislation	<p>Hubei Pilot ETS Implementation Plan</p> <p>Interim Measures for Management of Emissions Trading in Hubei Province</p> <p>Department of Ecology Environment of Hubei Province- Allocation Plan for Vintage 2019 (including list of covered entities)</p>

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