

China - Guangdong pilot ETS

General Information

<p>Summary</p>	<p>Status: ETS in force</p> <p>Jurisdictions: Guangdong</p> <p>Launched in December 2013, the Guangdong Pilot ETS is the largest of the Chinese ETS pilots. Following a scope expansion in 2016 of two new sectors, the ETS now covers the power, cement, steel, petrochemical, papermaking, and domestic aviation sectors, accounting for about 70% of the province's emissions.</p> <p>The Guangdong Pilot ETS has one of the most active markets among Chinese pilots with the largest market share for spot trading. Guangdong is the first pilot to introduce auction as one of the key allocation methods. It was mandatory for enterprises to purchase 3% of their allowances from auctions in 2013 before receiving the remainder for free. Since 2014, participation in auctions has been voluntary and the non-free allocation rate has been raised to 5% for the power sector and 3% for the remaining sectors. Since 2017, auctions have been held on ad hoc dates (rather than quarterly). Guangdong is among the few pilots that are open to foreign investors. In November 2016, Guangdong increased the maximum position of institutional and individual investors from three million to eight million allowances. Guangdong also allows unincorporated organizations, such as funds and trusts, to trade in its carbon market. As of 2020, it had 96 institutional investors. Guangdong is the first and only province in China that both implements an ETS pilot and is also one of the pilots for green finance policy.</p> <p>In late 2018, the ETS-related responsibilities in Guangdong completed the transition from its Development and Reform Commission to the Department of Ecology and Environment (DEE), as a result of the governance restructuring across China.</p>
<p>Year in Review</p>	<p>In order to further standardize the province's own offsetting program, Pu Hui Certified Emission Reductions (PHCER), the Guangdong Province PHCER Trading Rules were revised and re-issued in June 2020, setting new rules on the quantity and price of certain transaction types.</p> <p>Guangdong also introduced a new method of allowance transaction for the secondary market in June 2020 to improve its market efficiency. Under this so-called "bidding transfer," covered entities entrust the Guangzhou Carbon Emission Trading Center to organize auctions of their allowances rather than pursue bilateral trading, determining the minimum price, timing of sale, and other transaction rules in conjunction with the Center.</p> <p>The Guangdong DEE moved the compliance deadline for 2019 emissions from June to November 2020 as a result of the COVID-19 pandemic. In December 2020, the Guangdong government announced that its pilot completed its 2019 compliance period with a 100% compliance rate.</p> <p>In December 2020, Guangdong released its 2020 allocation plan with the list of covered entities. Compared to previous years, the allocation plan introduced one major change, namely an increase of free allocation for the aviation sector from 97% to 100%. The total</p>

	<p>cap for the 268 covered entities for 2020 is 438 MtCO₂; in addition, 27 MtCO₂ are kept as government reserves for new entrants and market stability.</p> <p>According to the Chinese national ETS rules, regional markets that have already allocated allowances for 2019 and/or 2020 for the power sector will remain under the regional system for those years. This implies that the power sector entities that are overlapping between Guangdong and the national ETS will be covered under the regional carbon market in 2020 and moved to the national one from 2021 onwards.</p>
Overall GHG emissions (excluding LULUCF)	Emissions: 610.5 MtCO ₂ e (2012)
Overall GHG emissions by sector (in MtCO ₂)	No information available yet.
GHG reduction target	<p>BY 2020: 20.5% reduction in carbon intensity compared to 2015 levels (Guangdong Province Work Plan for Controlling Greenhouse Gas Emission During the 13th Five-Year Plan Period)</p> <p>BY 2030: CO₂ peaking sometime before 2030 (Guangdong Province Work Plan for Controlling Greenhouse Gas Emission During the 13th Five-Year Plan Period). Some of the cities in the province, such as Guangzhou, have set the target of reaching or approaching the peak by as early as 2020 (Outline of Guangzhou Ecological Civilization Construction Plan 2016-2020)</p>
Carbon Price	<i>Current Allowance Price (per t/CO₂e):</i> CNY 28.21 (USD 4.09) (updated prices available here)

ETS Size

Covered emissions	0.70
GHGs covered	CO ₂
Sectors and thresholds	<p>Power, iron and steel, cement, papermaking, aviation, and petrochemicals.</p> <p>INCLUSION THRESHOLDS: 20,000 tCO₂/year or energy consumption 10,000 tce/year.</p>
Point of regulation	<p>Downstream</p> <p>Both direct and indirect emissions from electricity and heat consumption are covered.*</p> <p>*The electricity market in Guangdong has undergone some changes following the national power sector reform process. Guangdong's electricity spot market was officially launched at the end of 2018, and it is planned that by 2020, the electricity trading volume in the market will account for no less than 60% of the power generation in Guangdong province. There is no publicly available data on this yet.</p>
Number of entities	<p>242 existing entities, 37 new entrants (2019)</p> <p>245 existing entities, 23 new entrants (2020)</p>
Cap	465 MtCO ₂ e (2019), among which 27 MtCO ₂ e are kept as government reserves for new entrants and market stability (2019 and 2020).

Phases & Allocation

Trading periods	2013 and ongoing*
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	<p>*In the short term, the existing Chinese regional carbon markets are expected to operate in parallel with 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: Mainly free allocation through grandparenting based on historical emissions or emissions intensity, or benchmarking.</p> <p>Benchmarking is applied to coal- and gas-fired electricity generators (including heating, and combined heat and power), as well as to some industrial processes in the aviation, cement, paper, and steel sectors.</p> <p>Grandparenting on the basis of historical emissions is applied to some processes in the cement and steel industries and the whole petrochemical industry. Grandparenting on the basis of historical emissions intensity is applied to the power industry using special fuel generating units and heating boilers, other powder products in cement industry, captive power plants in the steel industry, special paper and paper product manufacturers, enterprises with pulp manufacturing, and other aviation enterprises.</p> <p>Ex-post adjustments based on real production data of the respective compliance year are also applied for those sectors that use benchmarks and emissions intensity methods.</p> <p>Compared to previous years, the 2020 allocation plan has one major change, namely an increase of free allocation for the aviation sector from 97% to 100%.</p> <p>AUCTIONING: Guangdong auctions a small share of allowances as a form of allowance allocation. During the first compliance year (2013), entities were required to purchase allowances in auctions in order to become eligible to receive their freely allocated allowances. This requirement was terminated in 2014. Since 2014, free allocation percentages remain the same, i.e., 95% for the power sector and 97% for the remaining sectors (for 2020, the aviation sector received 100% free allocation). Quarterly auctions were held until 2016; since 2017, they have been held on an ad hoc basis. Auctions are also subject to a reserve price (see “Market Stability Provisions” section). No auctions took place in 2018 or 2019.</p> <p>The allowance volume available for auction was adjusted from two million allowances (as had been the case until year 2018) to five million allowances from 2019 onwards. One auction took place in April 2020 with a floor price of CNY 25.84 per tCO₂e (USD 3.74), selling 400,000 allowances at the price of CNY 28.2 (USD 4.09).</p>

Flexibility

Banking and borrowing	<p>Banking is allowed.</p> <p>Borrowing is not allowed.</p>
Offsets and credits	<p>QUANTITATIVE LIMIT: The use of offsets is limited to 10% of covered entities’ annual emissions. Chinese Certified Emissions Reductions (CCERs) are allowed. As a mechanism that encourages the public to reduce carbon emissions, Pu Hui Certified Emission Reductions (PHCER) are also allowed since compliance year 2017. In addition to the quantitative limit applied to individual entities, Guangdong sets an upper limit to the total volume of offsets allowed. In 2019, entities were allowed to use up to 1.5 million offsets (CCER and PHCER) towards compliance obligations, with the priority given to the province’s CCERs and PHCERs first; then, other offsets will be allowed in accordance with the order of enterprises’ written applications until this limit is reached. The number for 2020 has not yet been announced.</p> <p>QUALITATIVE LIMIT: At least 70% of offsets used by each regulated entity must come from within Guangdong province. This rate is adjusted to 60% if offsets are generated in certain priority regions within Guangdong, as identified by the government (e.g., poor and ethnic minority group areas). Pre-CDM credits are not eligible. Credits from hydro and from most fossil fuel projects are also not eligible. Credits generated in other Chinese ETS pilot regions are not eligible. To be eligible, projects must relate primarily (i.e., more than 50%) to the reduction of CO₂ and CH₄ emissions.</p>

Market Stability Provisions	<p>RESERVES: 5% of allowances are set aside for government reserves for new entrants and market stability. The specific rules for market stability are provided by its ‘Trial Measures for ETS.’</p> <p>AUCTION RESERVE PRICE: Auctions under the Guangdong Pilot ETS are subject to an auction reserve price. Initially in 2013, the reserve price was set at CNY 60 (USD 8.69), and it was lowered to CNY 25 (USD 3.62) and increased to CNY 40 (USD 5.80) in steps of CNY 5 (USD 0.72) with each quarterly auction in 2014. In 2015, a so-called “policy reserve price” was set as an effective reserve price, which links the auction reserve price with the secondary market price. The reserve price was set at 80% of the weighted average price for allowances over the previous three months in 2015. In 2016, the policy reserve price was set at 100% of the weighted average price for allowances over the previous three months. The policy reserve prices for the four auctions for the 2016 compliance period were as follows: CNY 9.37 (USD 1.36), CNY 11.27 (USD 1.63), CNY 16.09 (USD 2.33), and CNY 15.15 (USD 2.20). When auctions were resumed in April 2020 for the compliance year 2019, the policy reserve price was set at 90% of the weighted average price for allowances over the previous three months considering the COVID impact.</p> <p>OFFSET AUCTIONS: Guangdong introduced auctioning for PHCERs in addition to the existing secondary market trading modes, with an auction reserve price set by the Emissions Exchange Guangzhou and offset project developers. In the latest two auctions of PHCERs in 2020 (28 December 2020), the reserve price for one offset project was set at CNY 22.25/tonne (USD 3.22) (80% of the weighted average price for allowances over the previous three months). The offered 52,355 tonnes offsets were sold at the price of CNY 35.3/tonne (USD 5.12). For the other one, the reserve price was set as CNY 33/tonne (USD 4.78), with all the 9,789 tonnes offered being sold at the price of CNY 36.06/tonne (USD 5.23).</p>
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Compliance

Compliance Period	<p>One year (1 January to 31 December): covered entities have until 20 June of the following year to surrender allowances.*</p> <p>* The 2020 compliance deadline was postponed 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. In addition, further validation was initially carried out by government-assigned expert groups in the first three compliance years. Onsite cross reverifications were conducted for the entities with questionable verification reports, as well as for randomly selected entities. A so-called “fourth-party independent evaluation system” has been in place since the 2016 compliance period. The “technical evaluation organizations” selected by the government carry out technical review and evaluation of the annual emissions reports and verification reports and undertake further onsite review and random inspection tasks. These technical evaluation agencies do not undertake regular third-party verification tasks.</p> <p>FRAMEWORK: The Department of Ecology and Environment of Guangdong has released guidelines for monitoring and reporting for the compliance and reporting sectors.</p> <p>OTHER: Industrial enterprises with annual carbon emissions of more than 5,000 tonnes and less than 10,000 tonnes are required to report their emissions. Verification is not required.</p>
Enforcement	<p>Penalties for failing to submit emissions or verification reports on time range from CNY 10,000 (USD 1,449) to CNY 50,000 (USD 7,246). Furthermore, companies failing to surrender enough allowances to match their emissions will be deducted twice the amount of allowances from the following year’s allocation and are fined CNY 50,000 (USD 7,246). Other nonfinancial penalties include negative impacts on access to bank loans and subsidy programs.</p>

Linking

Links with other systems

No information available yet.

Other Information

Institutions involved	<p>Guangdong Ecology and Environment Bureau (competent authority)</p> <p>China Emissions Exchange (Guangzhou) (trading platform)</p> <p>Guangdong Research Center for Climate Change (registry)</p>
Evaluation / ETS review	No information available yet.
Revenue	<p>Since beginning of program: CNY 815.46 million (USD 118.17 million)</p> <p>Collected in 2020: CNY 11.28 million (USD 1.63 million)</p> <p>Guangdong has been exploring the establishment of a Low Carbon Development Fund that would use auction revenues to promote further mitigation actions, carbon finance, and low-carbon industrial development. However, due to the change of the pilot's competent authority, further information regarding this measure has not yet been released.</p>
Implementing Legislation	<p>Guangdong Pilot ETS Implementation Plan</p> <p>Trial Measures for Carbon Emissions Trading in Guangdong</p> <p>Department of Ecology and Environment of Guangdong—Allocation Plan for Vintage 2019 (including list of covered entities)</p> <p>Department of Ecology and Environment of Guangdong—Allocation Plan for Vintage 2020 (including list of covered entities)</p>

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