

China - Chongqing pilot ETS

General Information

ETS Description

Chongqing launched its pilot ETS in June 2014. The ETS covered around 40% of the city's emissions in 2020. Among the eight Chinese pilots, the Chongqing ETS is the only one that covers non-CO₂ gases.

The Chongqing Pilot ETS covers 308 entities in the electrolytic aluminum, ferroalloys, calcium carbide, cement, caustic soda, iron and steel, and other industrial sectors. From 2014 to 2020, the Chongqing Pilot ETS operated with an absolute cap with an annual reduction rate applied to the base-year emissions level (i.e., the sum of each covered entity's highest annual emissions from 2008 to 2012). Until 2015*, the annual reduction rate was 4.13% and thereafter 4.85%. Auctioning was introduced in 2021 to provide compliance entities with additional supply to meet their compliance demand. Covered entities must surrender allowances for all their covered emissions, and allocation is based on auctions or free allocation.

The Chongqing Ecology and Environment Bureau (EEB) revised the ETS management rules in 2022, including general management rules and specific rules for MRV, managing allowances, allocation, and the registry. Since the revision, there has been no absolute cap for the system. Output-based methods are now applied in several industrial sectors.

In the short term, the Chongqing Pilot ETS operates in parallel with the national Chinese carbon market. When the national ETS expands to new sectors, the covered entities in these sectors will be integrated into the national ETS from the regional markets.

* Chongqing ETS launched in 2014, covering the emissions from 2013 in the first compliance period.

ETS Status

in force

Jurisdictions

Chongqing

Year in Review

In March, the Chongqing EEB published the "Management rules of Emissions Trading in Chongqing" to replace the 2014 "Interim Management Rules". This new set of rules changed the competent authority from the Chongqing Municipal Commission of Development and Reform to the Chongqing EEB and defined that the Chongqing EEB operates in parallel with the national ETS.

In September, the Chongqing EEB issued the "Management Rules of Allowances in Chongqing".

In November, the Chongqing EEB issued the "2021-2022 Allocation Plan for the Chongqing ETS". This announcement followed a public consultation process held in December 2022 on the draft version of the allocation plan. The published plan laid out a benchmarking method, historical intensity method, and grandparenting method for the Chongqing ETS for the first time. The plan also states that the compliance obligation is limited to 20% of the maximum shortfall of emissions and allows borrowing from 2023 pre-allocated allowance. These changes are in line with the national ETS.

In 2022, the Chongqing EEB issued for public consultation several draft documents, including management rules for the registry and verification agencies in Chongqing, as well as MRV guidelines for the ETS. These drafts are expected to be finalized in the near future.

Sectoral coverage

Industry

Revenue usage

General budget, including debt reduction

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO₂e)

188.1 MtCO₂ (2020)*

* No data is publicly available for recent years. Data here is provided by local experts.

GHG reduction targets

By 2030: Peak emissions (Chongqing Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy)

By 2060: Climate neutrality (Chongqing Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy)

Current Allowance Price (per t/CO₂e)

Average secondary market price: CNY 29.82 (USD 4.09) (updated prices available [here](#))

Size & Phases

Covered emissions (2020)

40.00%

GHGs covered

CO₂, CH₄, N₂O, HFCs, PFCs, SF₆

Phases

2013 and ongoing

Cap or total emissions limit

Currently, the total emissions limit under the Chongqing Pilot ETS is the sum of the bottom-up output-based level for all individual covered entities. Previously, the system used absolute caps that declined annually at a pre-determined rate. The cap was set in 2013 at 125 MtCO₂e. Until 2015, the annual reduction rate of the cap was 4.13%. From 2016 onwards, it was revised to 4.85%. Caps for the following years were:

2018 and 2019: 97 MtCO₂e

2020: 78.4 MtCO₂e

The system of absolute caps was replaced by intensity-based caps in 2021.

Sectors and thresholds

Unlike most other Chinese pilots, Chongqing does not pre-define which sectors are covered under its ETS; rather, it sets a threshold which applies to all entities in the industrial sectors, including electrolytic aluminum, ferroalloys, calcium carbide, cement, caustic soda, and iron and steel, and other industrial sectors. Entities in these sectors with emissions above the threshold are covered by the ETS.

The power sector was covered until 2019, after which it transitioned to the national ETS.

INCLUSION THRESHOLDS:

Until 2020: 26,000 tCO₂ per year or energy consumption of 10,000 tonnes of coal equivalent (tce) per year.

From 2021 to 2022: In the allocation plan, Chongqing lowered the threshold to 13,000 tCO₂ per year or energy consumption of 5,000 tce per year.

Point of regulation

Point source (power and industry); downstream (indirect emissions from electricity and heat consumption).

Type of entities

Companies

Number of entities

308 (2021 to 2022)

Allowance Allocation & Revenue

Allowance allocation

FREE ALLOCATION: From 2014 to 2020, Chongqing employed free allocation through grandfathering based on historical emissions: the highest number in the period spanning 2008 to 2012. Covered entities submitted their allowance allocation demand on a yearly basis, forming the basis of their free allocation. This value was adjusted if it exceeded the highest historical annual emissions (from 2008 to 2012) of the respective entities, by using the average of the two numbers. In addition, if the sum of the allocation for all the entities exceeded the top-down cap (see 'Cap or Total Emissions Limit' section), a reduction factor was applied to all the covered entities.

In the 2021 to 2022 allocation plan, the Chongqing EEB introduced both a historical intensity method and benchmark method for allocation. There are four methods in the plan. Benchmarks are now used in cement clinker and electrolytic aluminum production. The historical intensity is used for other procedures in the cement and aluminum sector. Grandparenting is used in all other sectors. For incineration waste power generation, shell gas production, new entrants, non-CO₂ emissions in all sectors, allocation will be the same as the emissions.

Chongqing used free allocation in 2021 and 2022. In 2023, in the absence of the final allocation plan, the government pre-allocated allowances to covered entities, which accounted for 70% of the region's emissions of 2022.

AUCTIONING: Auctioning was introduced in 2021. A small share of the annual cap could be auctioned. The main purpose of auctions is to provide compliance entities with additional supply to meet their compliance demand. To date, auctions have been held on an ad hoc basis. Three auctions have been held, in November and December 2021, and February 2022.

Total Revenue

CNY 336 million (USD 47.43 million) since beginning of program

Use of Revenues

Revenues are attributed to the city treasury.

Flexibility & Linking

Offset credits

The use of offset credits is allowed. Since September 2021, a local carbon offset program has been also operationalized which generates Chongqing Certified Emission Reduction (CQCER) credits for both compliance and voluntary use.

QUANTITATIVE LIMITS: Domestic offset credits (CCERs) and CQCERs are allowed for up to 8% of an entity's compliance obligation. At least 80% of the credits used must be generated within Chongqing city. Credits generated in Chengdu city may be used to meet up to 10% of the compliance obligation.

QUALITATIVE LIMITS: Offset credits from hydropower projects are not allowed.

Banking and borrowing

Banking is allowed. Borrowing was not allowed from 2014 to 2020. In the 2021 to 2022 allocation plan, borrowing was allowed. Companies with a shortfall of 10% or more could apply to borrow from a pre-allocated allocation for 2023, up to 50% of the shortfall.

Links with other Systems

In February 2022, the Chongqing city government and the Sichan provincial government released the “Joint Action Plan for Carbon Neutralization in the Twin Cities Economic Circle of Chengdu and Chongqing”. It provides impetus for advancing the development of compliance carbon markets as well as offset projects in the two cities as well as enhancing their collaboration.

Compliance

Compliance mechanism

Covered entities must surrender one allowance per tCO₂e emitted for all their covered emissions, and allocation is based on auctions or free allocation.

Compliance Period

One calendar year. The exact date for the covered entities to surrender allowances is set by the government on an annual basis and varies across years.

Monitoring, Reporting, Verification (MRV)

MONITORING: Covered entities are required to set up monitor plans and monitor their emission based on these plans.

REPORTING: Reporting of GHG emissions must be complete by the end of April for the previous year.

VERIFICATION: Third-party verification is required.

FRAMEWORK: The competent authority has published a guidance document for monitoring and reporting that includes methods for different emissions sources, including combustion, industrial processes, and electricity consumption.

Enforcement

There are no financial penalties for non-compliance. Non-financial penalties may include public reporting, and a record entered in the Chongqing City Enterprise environmental credit system.

According to the 2021 to 2022 allocation plan, compliance obligations are limited. Covered entities with free allowance that account for less than 80% of their verified emissions will have their allocation adjusted upwards to 80%, meaning a maximum 20% shortfall.

Market Regulation

Market Stability Provisions

5% of allowances from the total emissions limit may be set aside for market stability.

Market Design

MARKET PARTICIPATION: Compliance and non-compliance entities and individuals that meet the requirements of the carbon emission trading rules.

MARKET TYPES:

Primary: Allowances thus far have largely been allocated for free, with auctioning introduced in 2021 without a fixed schedule.

Secondary: There is a spot market at Chongqing Carbon Emissions Trading Center for trading of allowances, CCERs and CQ CERs. Due to the financial market-related regulations in China, no forward markets or derivatives are allowed yet.

LEGAL STATUS OF ALLOWANCES: Allowances are not considered financial instruments.

Other Information

Institutions involved

Chongqing Ecology and Environment Bureau: Responsible for establishing the Chongqing ETS after governmental restructure in 2020.

Chongqing Carbon Emissions Trading Center: Responsible for operating the trading platform, which belongs to the **Chongqing Asset and Equity Exchange**.

Chongqing Resource and Environment Trading Center: Responsible for the registry.

Regulatory Framework

[Management rules of Emissions Trading in Chongqing \(2023\)](#)

[Chongqing EEB Notice on Carrying out ETS Work for Compliance Year 2019](#)

[Chongqing EEB Notice on Carrying out ETS Work for Compliance Year 2020](#)

[Chongqing Working Guidance For Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy \(2021\)](#)

[Chongqing Allowance Allocation Plan for 2021-2022 \(2023\)](#)

[Management Rules of Allowance in Chongqing \(2023\)](#)

[Management Rules of Registry in Chongqing \(draft for comments\) \(2022\)](#)

[Measures for Management of Verification agency in Chongqing \(draft for comments\)\(2022\)](#)

[MRV Guidelines for Chongqing ETS \(draft for comments\) \(2022\)](#)

Evaluation / ETS review

No public information is available about the evaluation or review system. However, the Chongqing EEB has been revising the major managements rules since 2021.

Disclaimer

Copyright © 2022 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 [infoicapcarbonaction \[dot\] com](mailto:infoicapcarbonaction@icapcarbonaction.com) ([info\[at\]icapcarbonaction\[dot\]com](mailto:info@icapcarbonaction.com)).

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.