

Kazakhstan Emissions Trading System

General Information

ETS Description

Kazakhstan launched its ETS (KAZ ETS) in January 2013. It covered around half of Kazakhstan's CO₂ emissions in 2022, stemming from 212 installations in the power, centralized heating, extractive industries, and manufacturing sectors. Covered entities must surrender allowances for all their covered emissions, and allowances are distributed for free.

The KAZ ETS cap is formed bottom-up, based on installations' expected production output and a benchmark. A reserve of allowances, on top of the cap, is available to covered entities in case they exceed their planned output as well as for new entrants. In 2024, a total of 8.1 MtCO₂ allowances from the reserve were issued to 59 installations.

Since 2021, all allowances have been allocated via benchmarking. There is no quantitative limit to the offset credits that covered entities can use for compliance. Domestic offset projects in all economic sectors that are not covered by the ETS can generate credits. In 2023, a domestic offsetting standard, the Qazaq Green Certificate Program, was developed. It is yet to be decided if the credits certified under this standard will be eligible under KZ ETS.

Previously, groundwork for the development of the ETS was laid out in 2011 through amendments to Kazakhstan's existing environmental legislation. The system was briefly suspended in 2016 and 2017 to tackle operational issues and reform allocation rules, although MRV obligations still applied.

ETS Status

in force

Jurisdictions

Kazakhstan

Year in Review

An allocation plan for 2022 to 2025 was updated in January 2024, slightly decreasing the caps for 2024 and 2025 and reducing allowance reserves for those years by 19%. The introduction of auctioning is currently under development.

Sectoral coverage

Mining and extractives Industry Power

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

348.8 MtCO2e (2022)

GHG reduction targets

By 2030: 15% (unconditional) to 25% (conditional) reduction from 1990 GHG levels (NDC)

By 2060: Carbon neutrality ("Strategy on achieving carbon neutrality by 2060")

Size & Phases

Covered emissions (2022) 44.00% Verified ETS Emissions 152.80MtCO₂e GHGs covered CO2 only Phases PHASE 1: One year (2013) PHASE 2: Two years (2014 to 2015) (2016 and 2017: System suspended) PHASE 3: Three years (2018 to 2020) PHASE 4: One year (2021) PHASE 5: Four years (2022 to 2025) Cap or total emissions limit

A cap limits the total emissions allowed in the system.

PHASE 1: 147 MtCO₂ (plus new entrants' reserve of 20.6 MtCO₂). This equaled a stabilization of the capped entities' emissions at 2010 levels.

PHASE 2:

- 2014: 154.9 MtCO₂ (plus a reserve of 18 MtCO₂)
- 2015: 152.8 MtCO₂ (plus a reserve of 20.5 MtCO₂)

This represented reduction targets of 0% and 1.5% respectively, compared to the average CO_2 emissions of capped entities in 2011 to 2012.

PHASE 3: 485.9 MtCO₂ (plus a reserve of 35.3 MtCO₂). The cap was set at a 5% reduction by 2020 from 1990 levels. The cap was allocated for the overall compliance period of 2018 to 2020; there was no annual cap.

PHASE 4: 159.9 MtCO₂ (plus a reserve of 11.5 MtCO₂)

PHASE 5: 649.8 MtCO₂ for the overall period, with declining annual caps.

- 2022: 166.2 MtCO₂ (plus a reserve of 11.8 MtCO₂)
- 2023: 163.7 MtCO₂ (plus a reserve of 11.6 MtCO₂)
- 2024: 162.1 MtCO₂ (plus a reserve of 9.3 MtCO₂)

2025: 158.2 MtCO₂ (plus a reserve of 9.2 MtCO₂)

Sectors and thresholds

PHASE 1:Power sector and centralized heating; extractive industries and manufacturing: oil and gas, mining, metallurgy, chemicals industry.

PHASE 2:Same as Phase 1.

PHASE 3: Same as Phase 1 plus processing industries (production of building materials: cement, lime, gypsum, and brick).

PHASE 4: Same as Phase 3.

PHASE 5: Same as Phase 3.

INCLUSION THRESHOLDS: Facilities emitting more than 20,000 tCO₂/year.

Point of regulation
Point source
Type of entities
Installations
Number of entities
135 companies (212 installations)

Allowance Allocation & Revenue

Allowance allocation

PHASE 1: Free allocation (grandparenting), based on emissions data from 2010.

PHASE 2: Grandparenting (0% and 1.5% below 2011 to 2012 average emissions).

PHASE 3: Grandparenting or product-based benchmarking, chosen by each company (149 installations chose benchmarking and 76 chose grandparenting). Additionally, there was a reserve of 35.3 million allowances for new entrants, new stationary emission sources, and changes in output in case of the choice of benchmarking.

PHASE 4: Benchmarking. A reserve contained 11.5 million allowances for the same purposes as in Phase 3.

PHASE 5: Benchmarking. A reserve contains 41.9 million allowances for new entrants, new stationary emission sources, changes in output and for (planned) auctioning.

Flexibility & Linking

Offset credits

The use of offset credits is allowed.

QUALITATIVE LIMIT: Domestic offset credits in all sectors (GHG reduction or absorption activities) outside the scope of the ETS are allowed. Project applicants can submit their projects for consideration to the Ministry of Ecology and Natural Resources for approval and issuance of offset credits. These are carried out in accordance with IPCC methodologies and rules developed by the ministry.

QUANTITATIVE LIMITS: None.

No offset credits were surrendered for compliance in 2023.

Banking and borrowing

Banking is allowed within each phase, but not between phases.

Borrowing is not allowed.

Links with other Systems

The Kazakhstan ETS is not linked with any other system.

Compliance

Compliance mechanism

Covered entities must surrender one compliance unit (allowances or offset credit) per tCO₂ emitted for all their covered emissions.

Compliance Period

One year, due by the start of April of the year following the reporting period.

Monitoring, Reporting, Verification (MRV)

REPORTING: Reporting is required annually for installations emitting above the 20,000 tCO₂/year threshold.

Annual reporting is also required for operators of installations with emissions between 10,000 and 19,999 tCO₂/year. However, these operators are not required to participate in the ETS or to verify their annual emission reports. Reporting is required for CO₂, CH₄, N₂O, and PFC emissions.

VERIFICATION: Emissions data reports and their underlying data require third-party verification by an accredited auditor.

FRAMEWORK: "Environmental Code of the Republic of Kazakhstan 2021".

Penalties and enforcement

The non-compliance penalty equals five monthly standard units for each tCO₂. This was KZT 18,460 (USD 39.36) in 2024.

Market Regulation

Market Design

MARKET PARTICIPATION: Compliance entities; individuals, and legal entities involved in the implementation of offset projects. Brokers, banks or other financial institutions are not allowed to trade.

MARKET TYPES:

Primary: While domestic legislation allows for the establishment of a primary market through auctioning, to date allowances have been distributed for free through grandparenting or benchmarking.

Secondary: Pure spot market, no forward contracts or other derivatives. In the beginning of the system, trades had to be executed via the Caspy Commodity Exchange JSC, which remains the main trading platform. From Phase 3 onwards, several additional exchange platforms that signed an agreement with the operator of the state registry – JSC "Zhasyl Damu" – were made available for trading. Over-the-counter trading has been allowed since Phase 3.

LEGAL STATUS OF ALLOWANCES: In accordance with the Environmental Code, a carbon unit (emissions allowance or offset credit) is a commodity permitted for transfer among the subjects of the carbon market in the Republic of Kazakhstan.

Other Information

Institutions involved

Ministry of Ecology and Natural Resources: Responsible for establishing the ETS regulatory framework.

JSC Zhasyl Damu: Implementing authority, responsible for the registry and reserve management.

Caspy Commodity Exchange JSC: Operates secondary market auctions.

Regulatory Framework

Environmental Code of the Republic of Kazakhstan (2021)

Rules of State Regulation of Emissions and Absorption of GHGs (2022)

Updated national allocation plan for 2022-2025 (2024)

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