KAZAKHSTAN: AN EMISSIONS TRADING CASE STUDY

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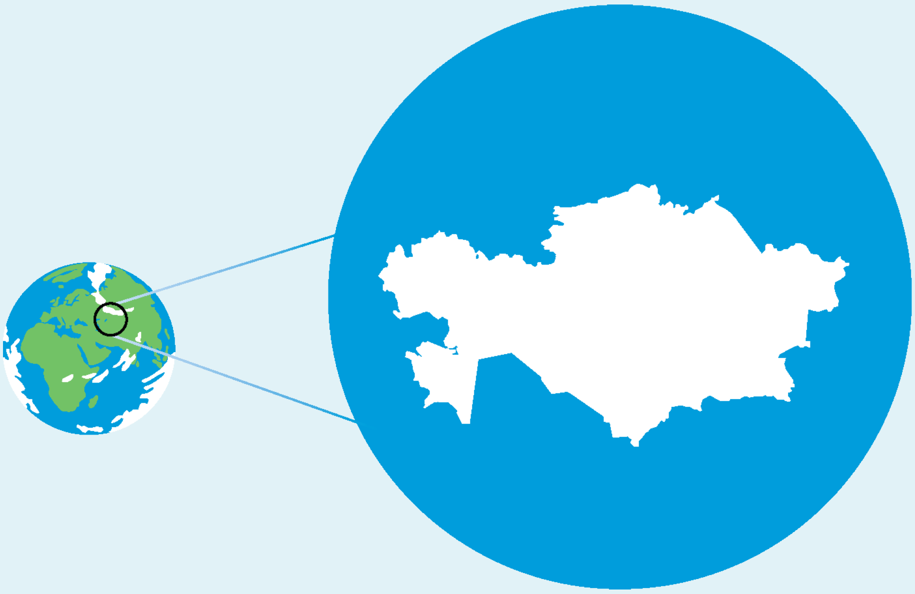
Kazakhstan
The World’s Carbon Markets: A Case Study Guide for Practitioners

Background

Kazakhstan is the largest economy in Central Asia housing almost 18 million people and extending over a land-mass exceeding that of Western Europe. In 2012, Kazakhstan began efforts to build a domestic emissions trading system (ETS) that led to the launch of its ETS pilot phase in January 2013 operating under a framework based on the EU ETS. The Kazakhstan Emissions Trading System (KazETS) was initially established as a tool to aid the country in switching to clean, more efficient technologies for industry, manufacturing, and electricity generation.

The Kyoto Protocol was ratified by Kazakhstan on March 26, 2009, alongside the implementation of energy reform and energy efficiency legislation. This was followed by the Strategic Development Plan of the Republic of Kazakhstan 2020 which was approved in February 2010 by decree of the President. In November 2010, the country introduced a new law, “On Amendments to Certain Legislative Acts of the Republic of Kazakhstan Relating to Environmental Issues” (Law on Amendments), enhancing the country’s ability to participate in carbon markets. Along with forming general rules for emissions trading and establishing liability for GHG emissions exceeding the limit defined in an allowance certificate, the Law on Amendments both categorizes operators into major and minor emitters, and facilitates Joint Implementation (JI) activities by excluding them from environmental licensing procedures.



On 3 December, 2011, Kazakhstan's government approved the amendment that would implement their "Ecological Code" legislation establishing the KazETS and making it the first nationwide cap-and-trade system in Asia. The program's rules were developed over the course of 2012 and approved as law on December 11, 2012. Many crucial design elements, such as allocation and measurement, reporting, and verification, are modeled on the EU ETS. The primary institution involved in the design and coordination of the KazETS is the Department of Climate Change (DCC) within the Ministry of Energy (formerly the Low Carbon Development Department of the Ministry of Environmental Protection). The DCC relies on a number of technical partners to implement the ETS.

Kazakhstan initiated a one-year trial period, or **Phase I**, of its ETS on January 1, 2013. **Phase II** spanned 2014-15. **Phase III** was expected to extend from 2016-20, and a National Allocation Plan (NAP) for these five years was published in December 2015. However, in April 2016 trading and penalties for non-compliance were suspended until January 2018, to give time to make amendments to the ETS, although annual reporting and verification requirements remain in place. The next Phase has not yet been confirmed: options for a 3 year (2018-2020) or a 5 year (2018-2022) period are under consideration and a new NAP will be prepared that corresponds to the new period.

In 2015, Kazakhstan submitted an INDC to the UNFCCC committing to an unconditional target of 15% reduction of all emissions from a 1990 baseline by 2030, and 25% target for the same period, conditional on international financial support. In its INDC it outlined measures that will deliver these reductions, and allowed for the use of market based mechanisms. In July 2016, Kazakhstan signed the Paris Agreement and committed to ratify the Agreement before the end of 2016. To achieve the targets, Kazakhstan will need to rely on reductions from its ETS (which covered 46-50% of national CO_2 emissions in Phases I and II), as well as its Green Economy programs that set targets for energy efficiency performance and renewable energy development.

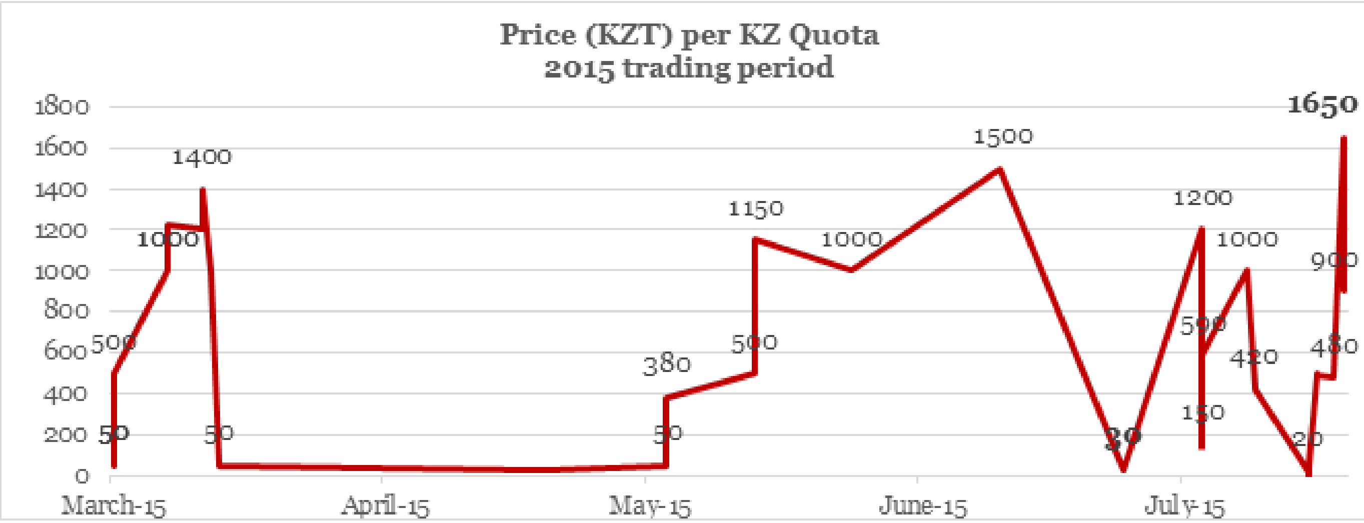
Summary of Key Policy Features

Long-Term Reduction Goal	Unconditional Target: 7% reduction below 1990 levels by 2020 and 22% reduction by 2030. Conditional Target: 34% by 2030 as compared to the 1990 baseline
Cap	Phase II Target: 0% in 2014 and 1.5% emission reduction relative to individual 2011-2012 baseline Phase III Target: Under preparation.
Compliance Periods	Phase I: 2013 Phase II: 2014-2015 Phase III: TBD, 2018-2020 or 2020-2022 are under consideration
Greenhouse Gases Covered	CO_2
Sectors Covered	Oil and gas production; power sector; mining and metallurgy; chemical industry; manufacture, production of building materials (cement, lime, plaster and brick)
Number of Obligated Entities	178 in Phase I, 166 in Phase II and still to be determined for Phase III
Threshold	Installation
Types of Credits Available	> 20,000 tCO_2 per year (based on average emissions of 2013-2014 levels)
Average Carbon Price	$2.3/ton (830 Kazakhstani Tenge) 2015 trading period
Allowances Allocation	100% Free of charge
Carbon Leakage Provisions	N/A

Use of Revenues	Revenue returns to the national Treasury.
Price/Market Control Measures	Limited guidance
Offsets	One project was approved and received allocations for 2014-2015 from the national reserve
Linkages	KazETS is modelled on the EU ETS; no direct linkages to date.
Market Regulation and Oversight	Limited guidance
Complementary Policies	Feed-in tariff for Renewable energy, Energy intensity performance benchmarks, Fuel efficiency standards
Enforcement/Penalties	Penalties were waived in Phase I (2013) and the first year of Phase II (2014); penalties in 2015 were $30/ton (10605 Tenge). Penalties are waived in 2016 and 2017. Penalties for 2018 and beyond are not yet confirmed.
Banking	Banking was not allowed in Phase I or II; banking will be allowed in Phase III and beyond.
Monitoring and Reporting	Every installation must file a monitoring plan; reporting and third-party verification required annually by April 1st

Carbon Price Evolution

In 2014, the first year of trading, 32 transactions were completed with prices for each allowance (called "quotas" in the KazETS) ranging from 10-833 KZT/ton ($0.06-4.53/ton) with an average price of 301 KZT/ton ($1.67). In its second year, 2015, forty transactions took place for a total of 1,983,922 tons (<1% of all tons capped under the system). The average price was slightly higher at KZT 380 ($2.06), but the range in prices was even broader than in 2014. Prices ranged from 10 to 1650 KZT ($0.05-8.92), with prices peaking in July.



$1=185 KZT (this is the exchange rate that was in effect during the 2015 trading period; from August 2015-2016 the average exchange rate has been closer to $1=335 KZT)

	March	April	May	June	July	August	Total
# of transactions	14	1	3	5	6	11	40
volume (tons)	**739,600**	**24,700**	**370,300**	**111,629**	**188,305**	**549,388**	**1,983,922**

Commentary on Market Functioning

As a young, and relatively small market, the KazETS is still developing.

Neither banking nor borrowing was allowed in Phase I or Phase II. During the same phases, an amount of emissions were set-aside in a "reserve" for specific reasons (new entrants, expanded production, etc.), but lacked details on the process for requesting, or the rationale for approving or denying requests for allowances from this reserve. As a result, it had little to no impact on trading. Regulated entities only had the right to sell quotas corresponding to reductions that they could demonstrate were a result of internal emission reduction projects (e.g., energy efficiency, energy saving). However, the rules for demonstrating such reductions were also unclear. Companies were also unsure of their ability to transfer units between business units. As a result, in 2014, most of the trades were internal shifts by companies moving allocations from one unit to another within their corporate family. In 2015, a handful of brokers were active in the market, leading to a slightly larger number of transactions. However, in the same year oversight of emissions reports shifted from the Department of Climate Change to the environmental regulatory committee; observers interpreted a low level of trading as caution before knowing how the new oversight body would evaluate compliance.

Although independent analysts believe that the system was long in Phases I and II, there is anecdotal indication that some entities were not able to purchase allowances at any price. Informally, companies have shared that they did not trade because of uncertainty, lack of experience, and/or small amount of potential revenue to be earned from selling reductions.

The Caspy Exchange, which operates the trading platform, has cooperation agreements with the Deutsche Bourse and the European Energy Exchange in place to access the global "M7" trading platform, and hosts an annual "carbon market forum" each year to engage with market participants and share activity. They provide information on transactions for the previous six months including closing price, brokers involved, and size of transactions on their website, www.caspy.kz. Even so, the Ministry of Energy began some investigations of transactions in 2016, raising questions about their validity. The April 2016 reforms do include provisions allowing banking, and clarify some of the rules regarding the reserve. However, important clarifications still need to be made about market oversight and operation, responsibilities of oversight bodies and market participants, and distribution of allocations from the reserve. Additional clarifications on definitions and rules for trading are needed for the market to function smoothly. These may be updated before the ETS resumes in January 2018.

What Distinguishes this Policy?

UNIQUE ASPECTS:

1. Kazakhstan was the **first country in Asia** to implement an economy-wide ETS in 2013. South Korea's economy-wide ETS began in 2015.

2. During Phase I and II, the KazETS applied to **companies**, not installations. In 2016, the Ecological Code was updated to specify that quotas will be allocated to installations going forward.

3. Kazakhstan's Kyoto status is unique. Kazakhstan is a non-Annex I country with respect to the climate change convention, but an Annex I country for the purposes of the Kyoto Protocol. Being considered an Annex I Party without Annex B status meant that Kazakhstan could not participate in any of the Kyoto flexibility mechanisms: the Clean Development Mechanism (CDM), Joint Implementation (JI) or International Emissions Trading (IET).

4. Initially, Kazakhstan's ETS implementation occurred relatively unhindered following the enactment of pertinent laws and the approval rules. On December 3, 2011, the KazETS was enacted through an amendment to the country's "Ecological Code". On December 11, 2012, rules and regulations for the KazETS were approved. On January 1, 2013, the pilot phase for the KazETS was initiated. A second phase took place from 2014-2015. However, industry involvement and trading activity remain weak.

5. However, **as of April 2016, the ETS was suspended until January 2018** to give time to make necessary system updates.

CURRENT CHALLENGES

1. In Phase I and II, allocations were assigned based on grandfathering, with every company facing the same reduction requirement. Leading up to Phase III, the ETS faced strong opposition from business for its failure to use an allocation approach that considers the specific circumstances of each sector (e.g., technological & economic reduction potential, competitiveness, etc.) and that relied on often unreliable historical data. The Government of Kazakhstan is now working with international donors (USAID, EBRD, World Bank) to evaluate the use of benchmarks for allocations in Phase III and beyond.

2. While current legislation outlines overall procedures for the development, review, approval and implementation of offset projects there are no methodologies, tools, or guidelines to allow for concrete projects to be developed.

3. Current MRV regulations still contain inconsistencies, which need to be corrected. Without a fully functional verification framework and reporting methodologies the reliability of data currently leads to a low level of confidence.

4. The Government of Kazakhstan has the aspiration to link the KazETS to another ETS, but a recognition that the KazETS needs more development before such a link can be seriously considered.

5. The lack of clarity on the future amendments to the Ecological Code, the fact that all allowances are currently distributed for free, and the transition from the first to the second phase of the ETS led to low levels of trading activity in Kazakhstan high variability, and unclear indication of the fundamental carbon price.

Author Acknowledgements

If you have any comments or suggestions for this case study, please do not hesitate to contact lead authors:

USAID
www.usaid.gov

USAID co-authors:
Aleksey Cherednichenko, Robyn Camp & Assel Sakibzhanova

USAID Contact:
Alexei Sankovski(alexei.sankovski@tetratech.com)

USAID Kazakhstan Climate Change Mitigation Program
Saryarka 6, Office 301
Astana, Kazakhstan 010000

USAID
FROM THE AMERICAN PEOPLE

EDF
www.edf.org

EDF co-authors:
Katherine Rittenhouse, Peter Sopher & Daniel Francis

EDF Contact:
Daniel Francis (dfrancis@edf.org)

Environmental Defense Fund
18 Tremont Street, Suite 850
Boston, MA 02108,
United States

EDF
ENVIRONMENTAL DEFENSE FUND®
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IETA
www.ieta.org

IETA co-authors:
Jeff Swartz & Stefano De Clara

IETA contact:
Jeff Swartz (swartz@ieta.org)

IETA
Rue de la Loi 235 Brussels 1040, Belgium

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Disclaimer: The authors encourage readers to please contact the USAID, EDF and IETA Contacts with any corrections, additions, revisions, or any other comments, including any relevant citations. This will be invaluable in strengthening and updating the case studies and ensuring they are as correct and informative as possible.