



Gas Network Modernisation

State Sector Project Assessment

Prepared in line with the EBRD's Access to Information Policy¹

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Sector	Energy
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Operation Description

KazTransGas-Aimak JSC ("KTGA", the "Company") is a natural gas distribution company, which supplies gas to residents and businesses in 14 regions of Kazakhstan. At the date of Board approval of the project, it served approximately 1MM households (or c.30% of the population) and 20,000 industrial enterprises throughout the country via production (regional) branches. The project involves provision of a senior corporate loan for up to KZT 20bn (USD 58.8MM equivalent) for 10 years (the "Loan") under the corporate guarantee of its parent, KazTransGas JSC (the "Guarantor"), the national gas pipeline operator fully owned by NC KazMunayGas ("KMG") and, ultimately, by Samruk Kazyna National Welfare Fund ("Samruk"). In 2020 the Bank approved a Liquidity Support package for the KazTransGas group, which involved, among other things, a restructuring of the terms of the existing loan.

The operation finances the capital expenditure programme focused on extension of gas distribution networks and modernization of the existing pipelines in the Aktobe, Mangistau and Kostanai regions of Kazakhstan. By expanding the availability of natural gas across the country, the Company is providing local businesses and population an opportunity to switch to cleaner and cheaper energy source for commercial and domestic use. The Project is estimated to result in substantial CO2 emissions savings.

Relevance

The Project was designed to meet the Bank's priority objectives as outlined in the respective country and sector strategies. It is part of the Bank's Strategic Initiatives including the GET and Local Currency and Local Markets Development. The operation supports Kazakhstan's INDCs under the Paris Accord and paved the way for a closer engagement with KazTransGas group, one of the Bank's key partners on decarbonisation in Kazakhstan. Shortly after the signing, the Bank and KazTransGas group

¹ As required by Section IV paragraph 1.4.8 of EBRD's Directive on Access to Information (2019), the Bank shall disclose information (excluding Confidential Information) contained in Operational Performance Assessment (OPA) reports for State Sector Projects selected for extended review, within 60 calendar days after completion of the relevant OPA report.

signed an MoU on further sustainable investments in the gas sector targeting greater GHG emissions savings and higher resource efficiency. The Project laid the foundation for, and marked the inception of, the decarbonisation work in the country, which primarily focuses on the coal phase out plan, introduction of efficient baseload and balancing capacity to support further roll out of renewables, and more broadly on development of the low carbon pathway to achieve net zero by 2060.

Approved and signed in 2016, the Gas Network Modernisation operation was designed to address and meet a comprehensive set of priority objectives and the policy goals of the Bank.

The project was signed shortly after the Green Economy Transition Approach was first adopted by the Bank, aimed at operationalising the approach to climate investments. The operation also followed the UNFCCC Conference of Parties in Paris of 2015 (the Paris Accord) where the Kazakh government made its first formal pledge to reduce economy-wide greenhouse gas emissions by 15% to 20% by 2030.

Structured to avoid CO₂ emissions through facilitating a switch from coal (the dominating fuel in Kazakhstan) to a much cleaner natural gas, the operation was one of the first Bank-approved projects to be fully aligned with the GET in support of Kazakhstan's commitments under the Paris Accord on a meaningful scale.

The operation is part of Bank's Local Currency & Capital Markets Development initiative and one of the first projects to be funded from the proceeds of the local currency CPI linked bonds, issued by EBRD for the first time in the domestic market. The Project meets the requirements of the Bank's Energy Sector Strategy aimed at supporting the cleaner production and distribution of energy. Through addressing the problem of high carbon intensity of the national gross output - a key transition challenge - it is also consistent with the Kazakhstan Country Strategy.

The operation marked the first engagement with KazTransGas group, the national operator of the gas pipelines and one of the Bank's partners in Kazakhstan on decarbonisation.

The results of extensive technical, environmental and social due diligence studies undertaken on the project, as well as lessons learnt from similar precedent operations, informed the project's structure and design. As an incumbent and the biggest company in the distribution segment, KTGA develops multiple projects at a time. EBRD financing was used to support the projects with the most impact potential, assessed and identified during the project preparation phase.

The project's transition benchmarks were designed to effectively track the progress of key objectives, which focused on gas penetration progress/rates, emissions savings resulting from the switch from coal, as well as the improvement of the regulatory environment, which Infrastructure Regulation and Tariff Policy Development TC ("Kazakhstan Infrastructure Tariff TC"), the technical assistance project associated with the operation, was designed to address in Kazakhstan. This initiative, targeting tariff reforms and commercialisation of the infrastructure sector,

was a critical element of the engagement, enabling the Project to qualify as a policy pilot and benefit from fully cost reflective tariff, protecting its financial stability.

The EBRD has been highly additional through the long-term nature of the loan as well as its denomination in the local currency. The additionality identified at project origination held largely true during the implementation of the Project as the long-tenor funding in KZT remained largely scarce since then.

As a regulated entity, charging customers Tenge-denominated tariffs, KTGA does not earn revenues denominated or linked to a hard currency. To avoid exposure to FX swings and protect projects' economics, the Company prefers to borrow in the local currency. The EBRD funding in KZT was instrumental in helping the client building an independent sustainable balance sheet and secure long term funding in local currency from commercial sources. The project was procured under the Bank's PP&R for Public Sector Operations, helping the Company build the needed capacity to prepare projects under international standards for competitive selection, evaluation and public tendering.

Effectiveness

The operational objectives of the Project were achieved in full, in some cases exceeding the targets. The gasification and network rehabilitation programme in the Aktobe, Mangistau and Kostanai regions was implemented throughout 2016-2018. While the Company's experience and expertise in managing the gasification and rehabilitation projects of similar nature was one of the key factors behind the successful completion, a thorough planning and monitoring coupled with conditionalities attached to the EBRD loan equally facilitated the effective execution.

More specifically, the targeted extension of the distribution networks in the Aktobe oblast was achieved as planned as more than 50 km of new medium and low pressure pipelines were built to connect the population centers of Kos Istek and Bogoslovka to the central gas network in 2017. The facilities in Kos Istek in particular provide an opportunity for more than 2,000 households and 29 public utilities and social/administrative units (such as schools) to connect to the network for heating and other household needs. The programme extended beyond these two settlements with the overall gasification ratio of the Aktobe region among the highest in the country.

Similarly, the commissioning of the new gas pressure reduction stations (AGRS) around key cities of the Aktobe region (including Alga with population of 24 000) was achieved on time and budget. The stations serve as critical link between the wholesale pipeline systems and the low-pressure distribution networks.

The Project progressed well on the delivery of its intended outcomes, in particular on the completion of the gas network modernisation and associated benchmarks related to CO₂ savings, volume of coal replaced and connection of new customers to the network.

Institutions, laws and policies that promote market functioning and efficiency

Kazakhstan Infrastructure Tariff TC, a technical assistance project led by EBRD, was completed with final recommendations presented to the Regulator. In response, the Regulator introduced a special regulatory platform (called "special order" / "osobyi poryadok regulirovaniya") for pilot projects. Gas Network Modernisation has been part of the pilot benefiting from the novel approach, which guarantees recovery of investment costs, facilitates speedy review of tariff approval applications and involves significantly less paperwork as opposed to prevailing practice. Pilot projects were also tested in several other regions including Kyzylorda and Mangistau oblasts. While the pilot regulation was subsequently replaced, new legislation (the 2018 Law on Natural Monopolies) includes the features and concepts tested under pilots and currently apply to all projects in the sector.

Setting standards under Green Economy Transition

The Project achieved the intended annual rate of GHG emission savings as preliminary calculations suggest that around 0.5 bcm of new gas (now available in the Project Area thanks to the investment) is replacing circa 1.1 million tons of coal used by households for domestic and commercial heating purposes every year. This marginally exceeds the carbon emissions target set by the operation (including in relation to the cumulative volume of coal pushed out as a result of the Project).

Market Expansion

The target in relation to the number of newly acquired consumers in the Project area was also achieved as reported number of new connections in the Aktobe and the Kostanai regions (where the new network was built) exceeded 10,000.

Kazakhstan Infrastructure Tariff TC, a technical assistance project, covering multiple sectors of the economy, has supported the Project and substantially contributed to the achievement of intended outcomes and objectives. The policy dialogue resulted in a number of recommendations presented to the Government.

Overall design of the Gas Modernisation Project facilitated timely project execution and delivery of anticipated impacts. These include efficiencies such as reducing required levels of paperwork.

Transition away from coal as a primary energy source for remote regions of Kazakhstan is one of key intended impacts of the operation. The Project has been part of a larger natural gas sector modernisation and development agenda championed by the KazTransGas group. Through the extension of distribution networks further into the regions, the Company has been able to expand the availability of gas in remote regions providing local businesses and population with access to cleaner and cheaper energy source for commercial and domestic use. The shift from coal, which still dominates the fuel balance of Kazakhstan, to natural gas, is contributing to

the significant improvement of air quality in the regions and reduction of major local pollutants, and significant reduction of CO2 emissions.

The Project also addressed the need to modernise certain parts of the physical infrastructure in the Mangystau region with successful implementation leading to improvements in more efficient and safe network operations, as well as reduction in maintenance costs and natural gas leakages; that is fugitive emissions.

Efficiency

Project preparation included thorough due diligence undertaken by EBRD technical, environmental and social specialists, who travelled to remote areas of Kazakhstan to ascertain the local impacts of the Project. The evaluation process also involved direct interactions with the Company's senior management based in Nur-Sultan headquarters on diverse range of due diligence aspects.

Close coordination and engagement with advisors enabled the Company to meet the applicable requirements of the Bank's Procurement Policies and Rules (PP&R) for Public Sector Operations while also achieving the intended timeline targets. EBRD finance was disbursed in stages. Overall, the Project was implemented on time and under budget.

Availability of the pipeline gas in some of the most remote areas of Kazakhstan has improved the living conditions of thousands of affected people. Significant improvement of air quality via elimination of sources of major local pollutants such as ash, nitrogen and sulphur oxides are direct results of the project. The pipeline gas is fast replacing the need in coal-fired stoves that each household maintain/use for heating purposes in the Project area, known for extreme colds in the winter season. Furthermore, thanks to the availability of gas, the operation created new markets, which will in turn is having a further ripple effect on local economies and beyond.

The resulting switch from coal to gas which is advancing in the regions thanks to the Project is already generating the intended impacts, which are set to be sustained the long run.

Implementation Summary

KazTransGas-Aimak JSC completed the Bank financed Project on time and on budget building new regional pipelines and rehabilitating the existing ones in three regions of Kazakhstan as intended.

As a result of the Project, access to gas supply improved considerably and the population in Aktobe, Mangystau and Kostanai regions received the opportunity to connect a continuous, reliable source of natural gas, replacing the need to maintain coal-fired stoves inside their homes for heating and cooking purposes, improving the living conditions and cutting harmful local pollutants resulting from coal combustion such as ash, nitrogen and sulphur oxides, in addition to reducing CO2 emissions. As part of the Project, the supporting regulatory framework was improved and tested on the back the Bank funded Kazakhstan Infrastructure Tariff TC. The regulation improvements supported the development of the Project and is expected to benefit future similar operations demonstrating replication potential to the industry, authorities and other stakeholders.

Risks associated with the Project were assessed through site visits, which allowed EBRD to understand procedures and resources available for

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managing the distribution system. The results indicate that the Company has a systematic approach for identifying and managing risks in operations. No significant issues related to biodiversity or resettlement as a part of this Project were identified. Based on EHS appraisal, an Environmental and Social Action Plan (ESAP) was developed and agreed with the client.

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