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Please cite this paper as: Salimova-Tekay, Jannat (2021). Infrastructure financing in Kazakhstan. MPFD Working Paper Series, No. WP/22/02. Bangkok: ESCAP.

Available at: http://www.unescap.org/kp

Tracking number: ESCAP/1-WP/42

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This working paper was prepared under the United Nations Development Account project titled “Addressing the transboundary dimensions of the 2030 Agenda through regional economic cooperation and integration in Asia and the Pacific”. I would like to thank Hamza Ali Malik for overall guidance and Vatcharin Sirimaneetham for feedback. The paper also benefitted from inputs from Ulukbek Usbaliev. The graphic layout was created by Pannipa Jangvithaya with support from Damir Tleukenov.
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AIFC</td>
<td>Astana International Financial Center</td>
</tr>
<tr>
<td>AIIB</td>
<td>Asian Infrastructure Investment Bank</td>
</tr>
<tr>
<td>AIX</td>
<td>Astana International Exchange</td>
</tr>
<tr>
<td>BAKAD</td>
<td>Big Almaty Ring Road</td>
</tr>
<tr>
<td>BAT</td>
<td>Best available technologies</td>
</tr>
<tr>
<td>BRI</td>
<td>Belt and Road Initiative</td>
</tr>
<tr>
<td>CAREC</td>
<td>Central Asia Regional Economic Cooperation</td>
</tr>
<tr>
<td>COVID-19</td>
<td>Coronavirus disease of 2019</td>
</tr>
<tr>
<td>CPS</td>
<td>Country Partnership Framework</td>
</tr>
<tr>
<td>CTF</td>
<td>Clean Technology Fund</td>
</tr>
<tr>
<td>DBO&amp;M</td>
<td>Design - Build - Operate - Maintain</td>
</tr>
<tr>
<td>DIFC</td>
<td>Dubai International Financial Center</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>EDB</td>
<td>Eurasian Development Bank</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering - Procurement - Construction</td>
</tr>
<tr>
<td>ERI</td>
<td>Economic Research Institute of Kazakhstan</td>
</tr>
<tr>
<td>ESCAP</td>
<td>Economic and Social Commission for Asia and the Pacific</td>
</tr>
<tr>
<td>ESG</td>
<td>Environmental, Social, and Governance</td>
</tr>
<tr>
<td>EUR</td>
<td>Single European currency</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>FMIS</td>
<td>Financial management information system</td>
</tr>
<tr>
<td>GCF</td>
<td>Green Climate Fund</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technologies</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IFI</td>
<td>International financial institution</td>
</tr>
<tr>
<td>JSC</td>
<td>Joint-stock company</td>
</tr>
<tr>
<td>KASE</td>
<td>Kazakhstan Stock Exchange</td>
</tr>
<tr>
<td>KEGOC</td>
<td>Kazakhstan Electricity Grid Operating Company</td>
</tr>
<tr>
<td>KTZ</td>
<td>Kazakhstan Temir Zholy</td>
</tr>
<tr>
<td>KZT</td>
<td>Kazakh Tenge</td>
</tr>
<tr>
<td>LLP</td>
<td>Limited liability partnership</td>
</tr>
<tr>
<td>LRT</td>
<td>Light-rail transit</td>
</tr>
<tr>
<td>LSE</td>
<td>London Stock Exchange</td>
</tr>
<tr>
<td>MW</td>
<td>Megawatt</td>
</tr>
<tr>
<td>NBK</td>
<td>National Bank of Kazakhstan</td>
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<tr>
<td>NFRK</td>
<td>National Fund of the Republic of Kazakhstan</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-performing loans</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PEFA</td>
<td>Public Expenditure and Financial Accountability</td>
</tr>
<tr>
<td>PPL</td>
<td>Public Procurement Law</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-private partnership</td>
</tr>
<tr>
<td>PV</td>
<td>Photovoltaic</td>
</tr>
<tr>
<td>SCF</td>
<td>Strategic Climate Fund</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium enterprises</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>TRACECA</td>
<td>Transport Corridor Europe-Caucasus-Asia</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>USD</td>
<td>United States dollar</td>
</tr>
<tr>
<td>USPF</td>
<td>United State Pension Fund of Kazakhstan</td>
</tr>
<tr>
<td>VAT</td>
<td>Value-added tax</td>
</tr>
<tr>
<td>VNR</td>
<td>Voluntary National Review</td>
</tr>
<tr>
<td>WEF</td>
<td>World Economic Forum</td>
</tr>
</tbody>
</table>
Abstract

This study assesses the landscape of Kazakhstan’s infrastructure financing. It starts with an analysis of the investment needs in the various sectors of infrastructure. It then proceeds with an assessment of the financing sources available to Kazakhstan in addressing these investment needs. Following an analysis of the challenges in developing infrastructure in Kazakhstan, the paper outlines the opportunities and modalities to expanding infrastructure finance and offers recommendations to unlock them.

Keywords: Kazakhstan, infrastructure, public-private partnership, PPP, SDGs, planning, tariff regulation, privatization

JEL classification: H54, H60
1. Introduction

This report was commissioned by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and aims to conduct in-depth national study on infrastructure Financing in Kazakhstan. The report includes infrastructure financing challenges, opportunities, modalities and recommendations for enabling regulations, governance, and policies in Kazakhstan.

Kazakhstan is an upper-middle income and the world’s largest landlocked developing country with the largest economy and highest GDP per capita in Central Asia. With its weakly diversified economy it has resisted the challenges from low oil prices and slow growth in Russia, China, and Europe in the pre-COVID times. The pandemic has further exacerbated these struggles and resulted in the sharp economic contraction by 3% in 2020 for the first time since the late 1990s. The World Bank expects the country’s economy to recover by 2.5% in 2021.¹

The fall in oil revenues will result in flipping of the consolidated fiscal balance from the last year’s surplus to a deficit of 6.1% of GDP in 2020, according to Fitch.² This will most likely lead to a budget deficit of around 9% of GDP for 2020. The social support measures aimed at alleviating the effect of the lockdowns are expected to reach KZT 5.9 trillion (8.6% of GDP). Revenue measures have also been announced that include tax exemptions for 2020 on land and property, excise duties and food import VAT, a 4% VAT reduction until end-3Q20, which are estimated at KZT 1 trillion (1.5% of GDP).

The tenge, Kazakh currency, fell to record lows against the US dollar in March-April 2020. It has recovered only slightly since then, further weighing on current account deficit. Inflation has risen, to 7.0% yoy in June 2020, from an annual average of 5.3% in 2019, due to rising food prices and pass-through from the depreciation of the tenge in recent months. The National Bank of Kazakhstan, the country’s central bank (NBK) predicts inflation will stay in the 8.0-8.5% range for 2020, above its medium-term target band of 4%-6%. The NBK cut its base rate to 9.0% from 12.0% in April 2020, reflecting easing pressures on the tenge and desire to support economic recovery.³

Kazakhstan has kept the pace of infrastructure investment since independence, despite its geographic and climatic challenges. It has one of the lowest infrastructure financing needs in the region.⁴ Facing the imminent economic contraction, Kazakhstan retains a low level of public debt (20.1% of GDP as of March 2020) and sufficient

amounts of fiscal reserves (USD 31.5 billion as of May 2020). This should help the country weather the shocks from the pandemic. While the buffers are strong, the shocks exposed vulnerabilities, including in the infrastructure sector. In the ICT sector for instance, the lockdowns aimed at curbing the spread of COVID-19 has revealed stark inadequacies in access to broadband internet for rural areas, limiting the online schooling efforts and access to healthcare. The sharp devaluation of tenge has brought many planned renewable energy projects to a halt. In transport, the pandemic has jeopardized the Government’s plans to develop major airports.

**The report is organized in the following way.** Section 2 outlines the key infrastructure investment needs. Sections 3 and 4 describe the sources and challenges of the three key components of infrastructure financing: public, private, and public-private partnerships (PPP). In section 5, we will look at policy recommendations that could be implemented to improve infrastructure financing in Kazakhstan. Section 6 concludes with the key findings.
2. Infrastructure Financing Needs

Kazakhstan has relatively well-developed infrastructure facilities compared to its neighbors in Central Asia and other landlocked developing countries, e.g. Kyrgyz Republic (see figure 1).

As estimated by ESCAP, Kazakhstan’s annual investment needs would amount to 2.7% of GDP until 2030, among the lowest in the region (see figure 2 below). This is partly explained by the relatively developed infrastructure legacy of the Soviet times and as the result of the massive state infrastructure development programs of the past years (see subsequent sections). Most of these investments are projected to be in the roads sector, followed by power/energy, water/wastewater infrastructure, and ICT.

Figure 1: Quality of infrastructure in Kazakhstan (2019)

A. TRANSPORTATION

Transportation in Kazakhstan vitally important given its large landlocked and sparsely populated territory with an extremely continental dry climate. According to the recent OECD assessment of low-carbon infrastructure investment needs in Central Asia, transportation calls for the largest amount of infrastructure investments. A bulk of it is expected in the road projects (81%), followed by rail (16%) and intermodal and air projects (2% and 1% respectively).

In roads, total investment requirements are the largest compared to other transport modes – estimated by OECD at USD 34.4 billion in 2019. Kazakhstan is ranked 56th globally on road connectivity with an index close to Eurasia average at 79.3 (by WEF as of 2019). While the focus of the past years has remained on the main roads connecting Kazakhstan to 6 international corridors (see table 1 below), the low quality of local roads still impedes equal access to social services, markets and jobs.

Railroads is currently the backbone of Kazakhstan’s transport infrastructure, and OECD estimates investment needs at USD 4.5 billion in its development. Lack of access to sea, flat terrain and sparsely located settlements are the main reasons behind putting priority emphasis to this transportation mode in the Soviet times, which now carries up to a half of the country’s freight. Kazakhstan railways run on the Russian standard gauge of 1,520 mm, which hinders the use of international investors and contractors in railroad construction and maintenance. For the country to increase its attractiveness in rail transportation, it will need to invest primarily in speed improvements, reduction of maintenance costs, electrification and construction of new lines.

Other transport includes intermodal and air projects, most of them being privately developed. OECD expects these investments to total USD 993 million.

---

Source: ESCAP (2020), Infrastructure Financing in Asia’s LLDCs: Challenges, Opportunities and Modalities.

Table 1: Kazakhstan’s Trans Eurasian Road Corridor Projects

<table>
<thead>
<tr>
<th>Name</th>
<th>Sub-sector</th>
<th>Description</th>
<th>Project value (USD m)</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Under construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South West Roads: Western Europe-Western China International Transit Corridor (CAREC 1B &amp; 6B)</td>
<td>Road</td>
<td>The project is a major corridor connecting Kazakhstan with China in the southeast, and to the border with Russia for a total of 2,787 km. It aims to improve Kazakhstan's transport efficiency, as well as road management and traffic safety.</td>
<td>4,250</td>
<td>IBRD</td>
<td>Brownfield</td>
</tr>
<tr>
<td>East-West Roads Project (Almaty-Korgos Section): Western Europe-Western China International Transit Corridor (CAREC - 1b)</td>
<td>Road</td>
<td>The project connects Kazakhstan's Khorgos Dry port with its Chinese counterpart Horgos via an ultra-modern 4-lane highway.</td>
<td>2,136</td>
<td>IBRD</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Centre-East, Astana-Ust-Kamenogorsk</td>
<td>Road</td>
<td>The project covers the reconstruction of a 932-km roadway between Center-East, Astana-Ust-Kamenogorsk.</td>
<td>949</td>
<td>Government</td>
<td>Brownfield</td>
</tr>
<tr>
<td>Almaty-Ust-Kamenogorsk</td>
<td>Road</td>
<td>The project entails the reconstruction of the road Almaty-Ust-Kamenogorsk (851 km), which is considered of national importance.</td>
<td>655</td>
<td>Project finance</td>
<td>Brownfield</td>
</tr>
<tr>
<td>(b) Planned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centre-West Road Corridor (Shalkar-Kandyagash)</td>
<td>Road</td>
<td>The project is a road link connecting the centre with the west of Kazakhstan, and the main gateway to the west to Europe, and to the east to China (central to BRI and Nurly Zhol).</td>
<td>1,000</td>
<td>Government, ADB</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Road development project (Kyzylorda-Zhezkazgan)</td>
<td>Road</td>
<td>The project is part of the ADB’s Country Operations Business Plan for Kazakhstan 2019-2021 and it is planned for 2021.</td>
<td>1,000</td>
<td>ADB</td>
<td>N/A</td>
</tr>
<tr>
<td>Almaty Ring Road PPP, Kazakhstan</td>
<td>Road</td>
<td>The project is a key link in the Western China-Western Europe transnational highway. It is also the first large-scale, capital-intensive, privately financed infrastructure project outside of the oil and gas sector.</td>
<td>740</td>
<td>IFIs</td>
<td>Greenfield</td>
</tr>
</tbody>
</table>

Source: OECD, 2019.
B. POWER

In the energy sector, the entire population has access to electricity, Kazakhstan being a net exporter of power generation and with transmission connections to all its Central Asian neighbors. Electric power distribution systems are also sufficient to provide adequate access to power for all regions of Kazakhstan. However, the long-term sustainability of the system is at risk due to underinvestment in modernization and replacement.

The bulk of investment needs in Kazakhstan’s power sector will relate to capacity replacement projects. Another important threat to sustainability is its heavy reliance on coal – over 81% of generation capacities are coal-fired, which will require investment in the decarbonization of the power sector. For the latter, the country plans to adopt regulations for best available technologies (BAT) at coal-fired heat and electricity generators, and adopt emissions trading regulations in line with international standards. In its 2019 report, Sustainable Infrastructure for Low-Carbon Development in Central Asia and the Caucasus, OECD anticipates, that more than half of new generation capacities in Kazakhstan would be renewable (see figure 3 below). However, for the country to be able to absorb all this new renewable capacity with unstable generation profiles, Kazakhstan will need to invest in the modernization of its grid, supply of balancing sources, and interregional power trade.

C. INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

ICT is Kazakhstan’s most developed infrastructure segment. World Economic Forum ranks Kazakhstan at 44th place among 141 countries, whereas neighboring countries such as Kyrgyzstan and Mongolia are placed on 65th and 96th respectively. Kazakhstan was ranked as 33rd in fiber internet subscriptions among 141 countries. All of the country’s administrative regions have access to 3G and 4G networks. In 2018 alone, the share of enterprises with internet access increased from 67.7% to 75.1%.

Figure 3: Planned generation projects in Kazakhstan by type (MW, 2019)

Source: OECD, 2019.

The state is a significant player in the ICT market of Kazakhstan. As of 2016, more than 30% of the ICT assets were owned by the Government (via Kazakhtelecom) with other main players being the three mobile operators: Kcell (21.7%) Kar-Tel/Beeline (16.1%), and Mobile Telecom-Service/Tele2 (13.3%). Kazakhtelecom JSC operates 93.3% of the fixed telephony and remained the absolute leader in this segment. It also owns trunk fiber-optic lines on behalf of the Government (see figure 4 below).

The ICT investments are sensitive to local currency devaluations, being dependent on the import of equipment denominated in hard currency and the revenues in local currency. From 2014 to 2016, investment flows to ICT industry decreased significantly, mostly due to the waves of the local currency devaluation. Nevertheless, there is an upward trend after that, with the around USD 220 million invested in the sector in 2018 (see figure 5 below).

**Figure 4:** Telecommunications market main players (% of marker share, 2016)

![Telecommunications market main players](source: Kazakhstan Stock Exchange, Telecommunication Industry of Kazakhstan, 2018)

**Figure 5:** Investments in fixed assets of ICT, (USD thousand, 2018)

![Investments in fixed assets of ICT](source: Zerde report, ICT in Kazakhstan, 2019)
The COVID-related lockdowns have revealed that the greatest drawback of Kazakhstan’s ICT segment was its inability to provide an even and reliable access to internet for the rural and isolated settlements within most administrative regions, undermining online schooling efforts and access to healthcare. As a result, in 2020, the government decided to allocate KZT 32.7 billion to the development of broadband internet access for rural areas as part of the Digital Kazakhstan state program (reported by the Ministry of Digital Development, Innovation and Aerospace). Some 31 digitalization projects would be implemented as a single framework raising additional funding of up to KZT 137 billion. The priority will be given to projects aimed at providing broadband Internet access to rural settlements and improving the quality of mobile communication services in all settlements.

D. WATER AND IRRIGATION INVESTMENT NEEDS

Water infrastructure is relatively well developed in Kazakhstan, including dams, levees, pump stations, reservoirs and irrigation distribution and drainage system. According to the 2019 WEF report, Kazakhstan’s population is less vulnerable to unsafe drinking water compared to Kyrgyzstan, Azerbaijan and Tajikistan (see on figure 6 below). All of the regions are provided with clean drinking water, although the reliability of the water supply could sometimes be an issue for some regions. According to OECD, between 2000 and 2019, Kazakhstan planned to invest USD 471.1 million in its water infrastructure which were divided into two main categories – water supply and sanitation (56.3 %) and irrigation and water management projects (43.7%).

Figure 6: Exposure to unsafe drinking water on a scale from 0 (worst) to 100 (best)

Agricultural irrigation plays a major role in the socio-economic development of Kazakhstan. The total length of irrigation networks is 16,500 kilometers. Around 70% of water resources are used in the agriculture, irrigation of pastures, water supply to livestock farms and industry. A bulk of this volume is used inefficiently due to the poor quality of the canals which results in the substantial amount of water losses. Another major problem is the lack of metering, which exacerbates the irrational use of water and its shortage in agriculture. Moreover, significant wear and tear of irrigation and drainage systems mean that a total of 456,300 hectares of irrigated land are suspended and 18,000 hectares of irrigated arable land are underutilized. To address these challenges, the Government has adopted a program for the development of the agro-industrial complex, which envisages investments in the restoration of the irrigation systems of the lands with regular irrigation on the area of 610,000 hectares.

Kazakhstan’s water supply is around 37,000 cubic meters of fresh water is available per square kilometer, which is an equivalent of around 6,000 cubic meters of renewable freshwater per capita per year. There are eight river basins in Kazakhstan, which give 70% of freshwater resources. Renewable surface fresh water resources are around 100.5 cubic kilometers during an average year. From the total amount, 56.5 cubic kilometers of water is generated in Kazakhstan and the remaining amount comes from neighboring countries (see figure 7 below).

As of 2017, 87.3% of the population is provided with centralized water supply, 11.5% with a decentralized water supply and 1.2% with imported water. There is a plan to ensure access of the population to centralized water supply in cities to 100% and 80% in rural areas by 2020, and 100% in rural areas by 2030. The government’s priorities are to implement an effective tariff policy to attract investment to the water supply and sanitation sector to upgrade infrastructure and increase competitiveness.

Figure 7: Fresh water supply sources (km³ of surface water, 2019)

3. Infrastructure Financing Sources

A. PUBLIC FINANCING

Kazakhstan’s strategic planning is based on the adoption of national programs which are then implemented within the overall budget process. The country’s key strategic document “Kazakhstan 2050”, adopted in 2012, recognized infrastructure development as a key challenge for sustainable development and elimination of regional economic disparities in the country. In support of this strategy, in 2015 the Government issued a “100 Concrete Steps” initiative. Some of the steps included plans for comprehensive institutional and legal reforms incorporating international best practice to promote, among other things, private sector and investments in transport and power infrastructure. Another important document, adopted in 2018, is the Strategic Development Plan until 2025 calling for major reforms in human capital, technological modernization, digitalization and efficiency improvement in the public sector. The main public financing resources and budget grants aimed at financing urban infrastructure investments, road projects and ICT capital expenditures are allocated out of the three Programs: Nurly Zhol, Nurly Zher and Digital Kazakhstan. They are described in more detail below.

1. State programs

a) Nurly Zhol

The first program “Nurly Zhol 2015-2019” program was launched after the 2014 oil price shock as a fiscal stimulus facility. It aimed at the formation of regional hub cities through the effective development of transport, industrial, housing, social and energy infrastructures. The Program allocated a total amount of funds equivalent to USD 9 billion for the first period. The funds were blended both in the form the state budget grants and in the form of loans of the state-owned enterprises (SOEs). A bulk of its proceeds were utilized for the implementation of the 6 trans-Eurasian road corridors, but also for the construction of new railways, repair of airport runways, and modernization of urban infrastructure, among others.

The second “Nurly Zhol 2020-2025”, has been approved as an extension of the first program, aimed at more urban infrastructure projects. Its design was mainly driven by the successful implementation of “Nurly Zhol 2015-2019”, shifting the focus from financing large-scale projects in transport to more municipal infrastructure, local roads, increase in mobility, labor productivity and quality of life. Under the program, until 2025 the Government plans to implement 112 infrastructure projects for a total amount of USD 12,790 billion. 14

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13 Decree of the President Of The Republic Of Kazakhstan On approval of the State Program for Infrastructure Development “Nurly Zhol” for 2015 - 2019 and amending the Decree of the President of the Republic of Kazakhstan dated March 19, 2010 No. 957.
14 Exchange rate for 29.10.2020 $1 = KZT 430,5, KZT 5.5 trillion.
b) Nurly Zher

Launched in 2017, the state housing construction program “Nurly Zher” aimed at providing new approaches to stimulate the housing construction and increase its affordability for the population. As such, it also included budget-funded investments in the construction and expansion of urban utilities infrastructure. While the main source of financing was the state budget, it was designed to blend in the investments from local private construction companies, state-owned enterprises (SOEs), municipal bonds raised at the capital market, and loans from international development institutions (see figure 8). The program is regarded as effective, resulting in an annual increase in investments directed to housing construction.

The second program, Nurly Zher 2020-2025, was approved in 2019 and includes investments in heat and water supply and sanitation, modernization of the communal sector and development of the housing infrastructure. The scope has also been expanded to include regulatory and institutional improvement measures aimed at: (i) enhancing the investment attractiveness and engagement of private capital; (ii) presenting modern technologies to increase the effectiveness of the systems; (iii) executing tariff reforms to increase the viability for private financial specialists; (iv) improving the legal and regulatory framework for water supply and sanitation services; (v) creating unified technical benchmarks for development and operation of water supply and sanitation systems; (vi) developing human resources capacities; (vii) introducing service contracts between water utilities and local administrations, and (viii) concentrating on decentralized wastewater treatment systems. The total program budget is around USD 12.6 billion, or more than USD 2 billion per each year. Approximately, USD 3.4 billion have been designated to water supply and wastewater measures.

Figure 8: Nurly Zher Funding (USD million, 2019)

Source: Decree of the Government of the Republic of Kazakhstan dated June 22, 2018 No. 372 on approval of the State program for housing construction “Nurly Zher”.
c) Digital Kazakhstan

The state program “Digital Kazakhstan” aims at improving the living standards of every citizen of the country through the use of digital technologies. It will be executed in five key directions from 2018 to 2022:

1) digitization of the economy;
2) transition to the digital state;
3) implementation of the digital Silk Road;
4) development of human capital; and
5) creation of innovative system.

The implementation of the program entails funding in the amount of USD 254 million from the state budget and USD 394 million from the SOEs. According to preliminary estimates, the direct effect of the digital economy by 2025 will provide a return on investment by 4.8 - 6.4 times to the total volume of investments, including private investments. Based on the report of the Ministry of Digital Development, Innovation and Aerospace Industry the program is showing notable progress. In 2018 and 2019, USD 96.7 million has been allocated to the implementation of the program and the effect of digitalization was USD 1,871 billion, mostly driven by savings in the time required to obtain Government services and from streamlining state tax and customs collection practices.

2. State-owned enterprises (SOEs)

State-owned conglomerates and development holdings dominate the infrastructure landscape in Kazakhstan. OECD estimates that the Government, through its quasi-state holdings, holds ownership of more than 750 enterprises in operation, which account up to 40% of GDP. Three public holding structures – Samruk-Kazyna, KazAgro, and Baiterek Holdings, along with their more than 600 subsidiaries – control a bulk of the assets in energy, transport, telecoms, urban utilities, and social infrastructure. Despite the efforts to privatize and commercialize these SOEs, private sector participation in them has not increased. According to the OECD report, interest remains low because of the regulatory burdens and price controls, especially in power and municipal utilities sectors.

a) Sovereign Wealth Fund Samruk-Kazyna

SWF Samruk-Kazyna is an investment holding established in 2008 in order to manage existing state assets and make new investments, on behalf of the Republic of Kazakhstan, both domestically and abroad. Its special legal status, defined as “quasi-state enterprise”, provides it with recourse to the state budget should its creditworthiness deteriorate. This makes the fund and its subsidiaries the preferred borrower/guarantor by many financial institutions aspiring to invest in infrastructure projects in Kazakhstan. Apart from its ownership in major extractive industrial enterprises, Samruk-Kazyna is a sole or majority shareholder of many infrastructure companies (see table 2 below), who are active borrowers, both domestically and internationally, to finance an array of projects on rehabilitation or modernization of existing, or construction of new, infrastructure assets.


16 Exchange rate for 29.10.2020 $1 = KZT 430.5, KZT 41.5 billion.

17 Exchange rate for 29.10.2020 $1 = KZT 430.5, KZT 802.5 billion.

Table 2: Samruk-Kazyna’s major infrastructure subsidiaries (2019)

<table>
<thead>
<tr>
<th>Company name</th>
<th>% ownership</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan Temir Zholy (KTZ)</td>
<td>100</td>
<td>National railway operator</td>
</tr>
<tr>
<td>Air Astana</td>
<td>51</td>
<td>National flag carrier airline</td>
</tr>
<tr>
<td>Samruk-Energy</td>
<td>100</td>
<td>Largest vertically integrated power conglomerate</td>
</tr>
<tr>
<td>Kazakhtelecom</td>
<td>52</td>
<td>Fixed line and mobile telecom operator</td>
</tr>
<tr>
<td>KEGOC</td>
<td>90</td>
<td>National power transmission company</td>
</tr>
<tr>
<td>Kazpost</td>
<td>52</td>
<td>National post and logistics company</td>
</tr>
</tbody>
</table>


b) Baiterek

“Baiterek” Holding has been created as the key institution of the Government to finance sustainable development by financing diversification, innovations, non-extractive export, and increase in labor productivity. Its quasi-state enterprise status has allowed to act as the implementing agency for many state programs, including among others Nurly Zhol and Nurly Zher, Business Roadmap 2020, State Program of Industrial and Innovative Development for 2015–2019, etc. It includes a dozen of subsidiaries, each using a specific financial instrument:

- a development bank – Development Bank of Kazakhstan
- a building society – Housing Construction Savings Bank
- a small-medium enterprise (SME) financing vehicle – Damu
- a venture capital fund – QazTechVentures
- an export credit agency – Kazakh Export
- a fund of funds – Kazyna Capital Management
- a project preparation advisory – Kazakhstan Project Preparation Fund

Despite its status of a development institution, Baiterek is a profitable enterprise. As of end-2019, the net profit of the Holding amounted to USD 120.7 million, which is USD 30.6 million higher than the target value. The Holding’s assets increased by 10.5% as well. One of Baiterek’s most prominent subsidiaries, Development Bank of Kazakhstan, has approved and provided financing for 140 investment projects totaling USD 20.2 million (KZT 8.7 billion). They have also provided debt and equity to several private infrastructure projects – mostly rolling stock operators in rail transport and renewable energy projects in power.

3. Sovereign borrowing

Despite the Government’s ability to finance infrastructure out of budget programs, many projects are partially or fully financed by sovereign or sovereign-guaranteed loans provided by international development banks and international financial institutions (IFIs). The preference to use IFI’s borrowed funds is usually explained by two considerations: (i) the procurement rules of international development institutions tend to provide better

competition and results; and (ii) IFI loans often come with technical assistance aimed at reform agenda and/or capacity strengthening elements. Most international development institutions have started their operations since Kazakhstan’s early independence years in the 1990s. They have played an important role in formulating the reform agenda and were instrumental in the modernization of the country’s infrastructure. The most prominent of them are the EBRD, the World Bank Group and the Asian Development Bank (see figure 9 below).

a) The World Bank Group

Since Kazakhstan’s joining the World Bank in 1992, Bank has provided 45 loans for a total amount of more than USD 7.9 billion. During the FY12–17 period of Country Partnership Framework (CPS) between Kazakhstan and the World Bank, USD 3.6 billion of lending was authorized. However, for FY18 and FY19, there was no lending to Kazakhstan. In 2018, a total of 13 projects were implemented, with investment portfolio amounted to USD 3.8 billion. Figure 10 shows the top 3 sectors of active portfolio in 2018, with 85% of the total amount in the transport sector.

Going forward, lending will be more focused on natural capital, inclusion and catalyzing of financing and private sector activities, rather than only physical infrastructure. The CPS FY20–25 foresees lending at levels below the previous CPS periods, expected at around USD 2 billion. Half of this amount is planned to be distributed for FY20–21 and the rest up to FY23.20

Figure 9: Kazakhstan’s loans from IFIs (USD billion, 1994-2019)

![Figure 9](http://example.com/figure9.png)

Source: Consultant’s calculations

Figure 10: World Bank portfolio composition, (% of total, 2018)

![Figure 10](http://example.com/figure10.png)


In addition to the sovereign lending program, International Finance Corporation (IFC), the World Bank Group’s private investment arm, had a total portfolio of USD 170.2 million. Its investments span across the financial, manufacturing, infrastructure, and agribusiness sectors. The current portfolio is divided in three major sectors: financial sector (35%), manufacturing and agriculture (47%) and infrastructure (18%).

b) European Bank for Reconstruction and Development (the EBRD)

As of 2020, the EBRD’s current portfolio stood at EUR 2,667 million (approx. USD 3,240 million), spread among 126 projects. A big portion of it is invested in the development of sustainable infrastructure (67%), followed by industry, commerce and agribusiness (28%) and financial institutions (6%), as shown on figure 11. Contribution in Kazakhstan’s infrastructure remains at the center of the EBRD support. By supporting inter-regional and cross-border rail and street projects, the EBRD seeks to improve transport networks and boost the economic inclusion of remote regions. One of the most notable investments recently supported by the EBRD is the BAKAD project – the first long-term concession for the construction and operation of a toll road around Almaty City with the length of 66 kilometers.

c) Asian Development Bank (ADB)

During the past 26 years, the ADB has played a major role in aiding Kazakhstan. It has provided project finance loans, technical assistance and knowledge to improve road networks, municipal and urban modernization, and to drive investments to develop renewable energy sources (see figure 12). The ADB has supported Kazakhstan to integrate into global transport networks and improve its transit corridors. With the assistance of the ADB, Kazakhstan has accomplished more than 600 kilometers of roadway along the transport corridor between Europe and China. Also, the ADB helped reconstruct 400 kilometers of the Aktau–Beineu road and 299 kilometers of road from Aktobe to Makat. In 2019, ADB provided a loan for the reconstruction of 156 km of roadway between Aktobe and Kandyagash. Currently, ADB is working with the government of Kazakhstan and other development partners to help develop Kazakhstan’s infrastructure in transport, energy, water, urban development, and rural services.
d) Other Development Banks

**Eurasian Development Bank (EDB)** is a multilateral development institution established by the Russian Federation and Kazakhstan in 2006 with the aim of enhancing trade and economic integration among its member states. The authorized capital of the EDB is USD 7 billion. EDB actively invests in transport (22.8%), energy (18.8%), and mining (17.9%). They are followed by the financial sector (16.6%), other infrastructure (11.1%), mechanical engineering (4.9%), metallurgy (4.7%), the agro-industrial complex (2%) and the chemical industry (0.5%).

**Islamic Development Bank (IsDB)** has been active in Kazakhstan since 1995. As of 2020, IsDB and Kazakhstan have jointly developed 49 projects (19 of them are active). The Bank contributed USD 1.6 billion in its portfolio in Kazakhstan. IsDB is financing many important projects, such as Rehabilitation of Irrigation and Drainage and Almaty Ring Road PPP (BAKAD).

**Asian Infrastructure Investment Bank (AIIB)** is a multilateral development bank which aims to improve infrastructure development in Asia. In December 2019, AIIB approved its first project in Kazakhstan – a USD 46.7-million loan for the construction and operation of a 100-MW wind farm in southern Kazakhstan which, when completed, will be the largest in Central Asia.

Source: www.isdb.org/kazakhstan.
B. Private financing

1. FDI

Foreign Direct Investment (FDI) has historically been the main source of private financing in Kazakhstan. It has played an important role in Kazakhstan’s economic growth, accounting for about 50% of the country’s GDP throughout the 2000s (OECD, 2017). FDI flows to Kazakhstan have been highly volatile, as much of them are directed towards extractive industries and thus dependent on commodity prices (see figure 13). In 2018, mining and metallurgy accounted for the largest volume of foreign investment (56.3%). Manufacturing and Trade took the second and third places (14,3% and 12,3% respectively). Figure 14 shows the breakdown of FDIs by sector.

The infrastructure sectors historically have not attracted much of the FDI. However, the global trend of falling investments in the oil & gas sector, coupled with Kazakhstan’s developments in the renewable energy, may change this picture. Box 1 on the next page presents an example of a renewable energy project fully financed out of private funds.

Figure 13: Kazakhstan’s net FDI (in USD million and % of GDP, 2008-18)


Figure 14: FDI – inflow in Kazakhstan by sectors (in% of total, 2018)

2. Banks

Kazakhstan’s banking sector is relatively small, domestically owned, and increasingly concentrated. It was established into two tiers, with NBK comprising the first tier and all commercial banks, both private and state-owned, comprising the second tier. As of January 1, 2020, the banking sector comprises 27 banks, of which 14 banks with foreign participation including 12 subsidiaries, with total assets at about USD 62.2 billion (KZT 26.8 trillion, or 39.6% of GDP). Due to the merger or closure of several banks, market concentration in Kazakhstan has increased.

Kazakhstan’s private sector loans lag behind the OECD benchmarks. One of the reasons for this lagging is that SOEs account for share of banks’ clients (see figure 15 below). Overall, SOEs dominate the local business sector, holding assets worth almost half of GDP and contribute one-third of all

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**Box 1: Total Eren’s Nomad and M-Kat PV Projects**

*Nomad* is a 28 MW solar PV project located close to the village of Zhalagash in the Kyzylorda region. *M-KAT* is a 100 MW solar PV power plant located next to the village of Shu in the Zhambyl region. Both projects are being developed by Total Eren.

Nomad is financed using a local-currency, EBRD loan of 9.8 billion KZT (approximately USD 26.4 million). M-KAT is co-financed between the EBRD and the ADB with local currency senior loans equivalent to USD 88.5 million. The total project costs for both are close to USD 157 million. Both projects are being constructed under an EPC by Metka EGN, a subsidiary of Mytilineos S.A. of Greece. Nomad and M-KAT together are anticipated to generate up to 225 GWh each year, thus reducing CO2 emissions by about 300,000 tons per year.

*Source: Total Eren press release.*
employment. Meanwhile, the portfolio of domestic banks is skewed towards retail lending, with infrastructure loans not exceeding 6% of total portfolio (see table 4 below, lines marked grey).

Table 3: Banking sector of Kazakhstan, key highlights

<table>
<thead>
<tr>
<th>Rates/Data</th>
<th>01.01.2019</th>
<th>01.01.2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets to GDP%</td>
<td>40.8%</td>
<td>39.6%</td>
</tr>
<tr>
<td>A loan portfolio to GDP%</td>
<td>22.3%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Client deposits to GDP%</td>
<td>27.6%</td>
<td>26.6%</td>
</tr>
</tbody>
</table>


Figure 15: Domestic credit to private sector (% of GDP, 2019)


Table 4: Breakdown of commercial bank loans by sector (in KZT billion April, 2020)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Amount (KZT billion)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individual entrepreneurship</td>
<td>8,700</td>
<td>69.81%</td>
</tr>
<tr>
<td>2 Process manufacturing</td>
<td>1,300</td>
<td>10.43%</td>
</tr>
<tr>
<td>3 Mining</td>
<td>335.4</td>
<td>2.69%</td>
</tr>
<tr>
<td>4 Other relevant manufacturing industries</td>
<td>249.7</td>
<td>2.00%</td>
</tr>
<tr>
<td>5 Agriculture</td>
<td>253.6</td>
<td>2.03%</td>
</tr>
<tr>
<td>6 Construction</td>
<td>673.7</td>
<td>5.41%</td>
</tr>
<tr>
<td>7 Transportation and storage</td>
<td>535.3</td>
<td>4.30%</td>
</tr>
<tr>
<td>8 Rental and leasing</td>
<td>165.8</td>
<td>1.33%</td>
</tr>
<tr>
<td>9 Information and communication</td>
<td>125.2</td>
<td>1.00%</td>
</tr>
<tr>
<td>10 Healthcare</td>
<td>70.8</td>
<td>0.57%</td>
</tr>
<tr>
<td>11 Education</td>
<td>31.4</td>
<td>0.25%</td>
</tr>
<tr>
<td>12 Advertising</td>
<td>21.1</td>
<td>0.17%</td>
</tr>
<tr>
<td>Total</td>
<td>1,246.2</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: https://lsm.kz/kreditovanie-otrasli.
3. Capital market

Despite many attempts, Kazakhstan’s capital market remains relatively less developed. Since independence, Kazakhstan has created an inducive regulatory environment, a modern trading infrastructure, and has conducted several rounds of state public offerings. The first Kazakh stock exchange (KASE) was launched in 1993. It has seen the first trade in government securities, first initial public offerings, first bond issues, etc. However, the market remained small, and measures to boost liquidity and increase trades have not resulted in more vibrant trading. By 2018, KASE traded a total volume USD 1.6 billion. KASE did not list any initial public offerings over the last three years, but it has actively offered a variety of bonds by private companies and SOEs (see table 5).

In 2018 the Government launched Astana International Financial Center (AIFC). It is modeled on the Dubai International Financial Centre (DIFC) and has a separate legislation, based on the principles of English law. Its main objective is to serve as the gateway to investing in Kazakhstan. The stock exchange organized within AIFC, Astana International Exchange (AIX), is not governed by the Kazakh legislation. As of 2020, AIX has listed over 20 private and public bonds totaling USD 7.5 billion, including 6 government bond issues by the Ministry of Finance and Kazakhstan Temir Zholy, the national railway operator. Some of the recent initial public offerings on AIX include Kazatomprom, an SOE, and Kaspi.kz, a local bank, with dual listing with LSE.27

Not all policy measures have had a positive impact on the development of Kazakhstan’s capital markets, though. The vibrant market of institutional investors was mostly driven by a cohort of professional asset management companies in investing on behalf of a dozen of private pension funds. Their nationalization in 2013 has had the greatest negative impact on the development of the Kazakh capital market (see box 2 below).

<table>
<thead>
<tr>
<th>No.</th>
<th>Company</th>
<th>Sector</th>
<th>Offering (KZT million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;Kazakhstan Sustainability Fund&quot; JSC</td>
<td>Financial (SOE)</td>
<td>391,517</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Microfinance Organization OnlineKazFinance&quot; LLP</td>
<td>Financial (private)</td>
<td>3,332</td>
</tr>
<tr>
<td>3</td>
<td>Agrarian Credit Corporation JSC</td>
<td>Financial (SOE)</td>
<td>40,462</td>
</tr>
<tr>
<td>4</td>
<td>Development Bank of Kazakhstan JSC</td>
<td>Financial (SOE)</td>
<td>80,550</td>
</tr>
<tr>
<td>5</td>
<td>Eurasian Development Bank</td>
<td>Financial (SOE)</td>
<td>40,000</td>
</tr>
<tr>
<td>6</td>
<td>KazAgroFinance JSC</td>
<td>Financial (SOE)</td>
<td>19,492</td>
</tr>
<tr>
<td>7</td>
<td>Kazakhstan Electricity Grid Operating Company (KEGOC) JSC</td>
<td>Power (SOE)</td>
<td>9,032</td>
</tr>
<tr>
<td>8</td>
<td>KazTransGaz Aimak JSC</td>
<td>Gas pipes (SOE)</td>
<td>5,676</td>
</tr>
<tr>
<td>9</td>
<td>Mortgage organization &quot;Kazakhstan Mortgage Company&quot; JSC</td>
<td>Financial (SOE)</td>
<td>600,480</td>
</tr>
<tr>
<td>10</td>
<td>TechnoLeasing LLP</td>
<td>Financial (private)</td>
<td>1,417</td>
</tr>
<tr>
<td>11</td>
<td>Wholesale and retail trade venture JSC</td>
<td>Financial (private)</td>
<td>3,859</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,195,817</strong></td>
</tr>
</tbody>
</table>


Box 2: Unified State Pension Fund (USPF)

In 2013, Kazakhstan has nationalized its private pension funds into a single entity, USPF, with the objective to safeguard their assets from the troubles that the country’s financial system was suffering after the 2007 crisis. The newly created mega-fund, USPF, has been put under the management of the National Bank of the Republic of Kazakhstan (NBRK), the country’s central bank. As a result of the merger, an immense amount of financial assets of Kazakhstan’s citizens were concentrated in the hands of the state, without prior arrangements for management of conflict of interest. More importantly, this has put a halt the development of the country’s capital markets and has wiped out a class of domestic institutional investors.

The success of NBRK as the manager of the fund has been questionable, with local media reporting stories of dubious investments in defaulting Azeri banks* or nonexistent mining companies.** More important however, have been the suspicions that the state has used the fund to patch cash shortfalls of SOEs, or prop up prices for their offerings.*** As of January 2020, more than 50% of the Fund’s KZT 11-trillion assets have been invested in Government securities and papers issued by national SOEs.


C. Public private partnerships

Kazakhstan has been the pioneer in the region of Central Asia pursuing public-private partnership (PPP). The first law distinguishing PPP as a separate instrument in the development and modernization of infrastructure facilities was adopted as early as 2007. So far, Kazakhstan has pursued PPP projects in roads, urban transport, airports, healthcare and primary education. As of 1 January 2020, 717 PPP contracts have been executed in Kazakhstan with total value of KZT 1.6 trillion (approximately $3.72 billion), according to the Kazakhstan Public-Private Partnership Center JSC, the state institute responsible for implementing PPP projects.28

The legal framework regulating PPP is based on the several legislative acts, the primary ones are the law “On Public Private Partnership” and the law “On Concessions” and various Presidential Degrees and orders. These legislative regulations provide the broad legal basis for the development of infrastructure though PPP mechanisms. The law “On Concessions” application extends to bilateral contracts with

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certain limitations in the PPP project costs and relates to projects in social infrastructure. The law “On Public Private Partnership” is broader on its application to different sectors of economy and introduced a more extensive legal framework that provides PPP policy with a stronger contractual and institutional foundation. The law outlines possible types of PPP contracts, including concession agreements, trust management of state-owned property, rental/lease of state-owned property, and finance leases, as well as contracts for technology and pre-production prototype development, pilot testing and short-run production, life cycle contracts, after-sales service contracts and other contractual forms.29

The institutional responsibilities for PPP in Kazakhstan are scattered among several agencies both at the national and at the subnational level. Pipelines are being formed by the ministries (national projects) and municipal authorities (regional projects).

The responsibilities for project preparation, due diligence and approval are spread among the Kazakhstan PPP Center (methodological advice), the Kazakhstan Project Preparation Fund (feasibility studies, value-for-money analysis, etc) and various ministries (sector-specific approvals).

The efficiency of PPP projects is evaluated on the basis of their commercial and budgetary elements. The analysis includes also socio-economic efficiency, considering the benefit, profitability and payback period of the project. The Almaty Ring Road concession (approximately USD 900 million in capital expenditures), is the largest PPP project in the country to reach financial close (see box 3). It has served as the pilot for testing the institutional setup, legal provisions, and commercial structuring approaches for the subsequent projects. Figure 16 below lists some of the large-scale projects in the pipeline.30

![Figure 16: Largest PPP projects in Kazakhstan (USD million, 2019)](image)

Source: Economist Intelligence Unit, Infrascope.

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D. The Belt and Road Initiative

The Belt and Road Initiative (BRI) declared by the Chinese Government in 2013 to improve the connectivity and cooperation of China with Europe, Africa and Southeast Asia should have a direct impact on Kazakhstan, its immediate neighbor toward the West. The scope of the initiative has two main components, each has significant infrastructure impact: the Silk Road Economic Belt (the “Belt”) and the New Maritime Silk Road (the “Road”). The “Belt” links China to Europe through Central and South Asia. The “Road” links China to the nations of South East Asia, the Gulf countries, East and North Africa, and on to Europe. The initiative focuses on the investment in roads, ports, railways, airports, power plants, oil and gas pipelines and refiners, with a total cost of investments are estimated at USD 575 billion. A bulk of it will be directed to energy, followed by transport,

Box 3: Big Almaty Ring Road (BAKAD)

BAKAD is a major PPP project carried out within the framework of the Nurly Zhol program. Its implementation is an important event for the economy of Kazakhstan, as this is the first large-scale infrastructure development project using public-private partnership mechanisms. Large international companies are involved in its implementation.

The PPP tender was formally announced on January 14, 2015, to select a concessionaire using a two-stage procedure. The first stage results were announced on April 7, 2015, with the selection of 9 consortia out of 27 international and local applicants. On February 7, 2018, a concession agreement for the construction and operation of the BAKAD was concluded with a Turkish-Korean consortium. The structure included “Alsim Alarko Sanayi Tesisleri ve Ticaret A.S.” (Turkey), “Makyol Insaat Sanayi Turizm ve Ticaret A.S.” (Turkey), “SK Engineering and Construction” (Korea), and “Korea Expressway Corporation” (Korea).

The EBRD facilitated a USD 585 million financing package (an A-loan of USD 225 million for the EBRD’s own account, B-loan of USD 125 million syndicated to Bank of China (USD 100 million) and PGGM (USD 25 million), as well as parallel loan facilities of USD 135 million by the Eurasian Development Bank and of USD 100 million by the Islamic Development Bank).

which is estimated to be USD 144 billion (figure 17 below shows the sectoral distribution). BRI is expected to bring positive impact on trade, logistics, development of new manufacturing hubs and facilitation of new trade deals. The World Bank estimates that the Initiative will increase the trade volumes from between 2.8 and 9.7 percent for corridor economies and between 1.7 and 6.2 percent for the world. The report also states that BRI will considerably improve trade, FDI flows, and living conditions for citizens – but it will happen only if corridor economies adopt suitable policy reforms, which will maintain debt sustainability, expand trade, increase transparency and decrease social and corruption risks.³¹

Kazakhstan became one of the first nations to support BRI, reflecting its goals in the state program “Nurly Zhol” and investing in the road and rail corridor projects. The synergy between the two initiatives focuses on the optimization of legal and regulatory environments, which could result in a faster implementation of the BRI than in other participating countries. Indeed, a combined effort of BRI and Nurly Zhol is already showing good results. For example, the dry port “Khorgos” on the Kazakh-Chinese border is now processing a greater number of containers daily, thus offering different logistic solutions.³² The World Bank estimates that the reconstruction of some of the passages along the trans-Eurasian road corridors completed in 2018 has improved travel times by 40% and reduced transport costs from USD 0.26 to USD 0.24 per vehicle-kilometer. Due to the mitigations of some indicators, the trade is expected to increase in the following years.

![Figure 17: BRI investments by sector (in% of total, 2019)](image)


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³¹ World Bank Group, *Belt and Road Economics: Opportunities and Risks of Transport Corridors*, 2019
³² Samruk Kazyna, *One Belt & One Road Leveraging infrastructure value potential*, 2017
4. Infrastructure Financing Challenges

A. PUBLIC FINANCING

Given the relatively developed state of Kazakhstan’s infrastructure and its moderate financing needs, fiscal space is not a major issue. Despite the imminent economic contraction induced by the pandemic and the fall in commodity prices, Kazakhstan has managed to retain a low level of public debt (20.1% of GDP as of March 2020) and sufficient amounts of fiscal reserves (USD 31.5 billion as of May 2020). The National Fund of the Republic of Kazakhstan (NFRK), while not being readily available for the Government to finance its infrastructure investment needs, still does represent a strong potential funding source. However, despite ample fiscal space, there remain other public infrastructure financing challenges. These include efficient planning of infrastructure investment, aligning infrastructure investment with national SDGs, and optimal procurement implementation and monitoring of the results.

1. Investment planning

Kazakhstan’s state planning and programming is structured in three tiers of strategic documents. Long-term national development strategies like Kazakhstan-2050 occupy the top tier, and its objectives are cascaded through lower-tier mid-term strategies (e.g. the Strategic Development Plan to 2025), then five-year programs, sectoral strategies and subnational development plans. The primary documents defining infrastructure development investment needs are the Nurly Zhol/Nurly Zher state programs, the Digital Kazakhstan program and the Concept for the Transition towards a Green Economy 2013-2020. They drive budget decisions for their implementation.

Although the institutional capacity of the government bodies in Kazakhstan is generally considered stronger than of its peers in the region, infrastructure investment planning still lacks coordination between various bodies at the national level and with the subnational governments. The state planning function has also been subject to constant reforms, reshufflings and staffing changes. Certain important functions (e.g. environmental due diligence, strategic water management, and climate goals) lack independence and clout. Better screening and prioritizing infrastructure projects and aligning them with long-term development and climate goals would help increase the socio-economic impact of infrastructure projects in the country. (see box 4 below for the case of Astana LRT). Projects that fail to demonstrate viability and benefits often have difficulties in raising financial resources. If they have not been properly scrutinized for potential environmental and social risks, they tend to attract the negative views from the civil society and end up being delayed or canceled.
2. Linkages to SDGs

The 2030 Agenda for Sustainable Development enjoys full political support at the highest level of the state. The Coordination Council on Sustainable Development Goals was created in August 2018 and is chaired by the Prime Minister and consists of 5 working groups (People, Prosperity, Planet, Peace and Partnership). The Council’s meetings are prepared and coordinated by the Ministry of National Economy and supported by the Economic Research Institute (ERI), with analysis and data. In July 2019, Kazakhstan presented its first Voluntary National Review (VNR) during the High-Level Political Forum on Sustainable Development.

Box 4: Astana Light Rail Transit (LRT)

Astana LRT was first proposed in 2005 as an express transit project to link the airport and the railway station. Initially, it enjoyed the support of international financial institutions, who were willing to provide technical assistance for feasibility studies and planning. It was to be implemented as a PPP. The preliminary economic cost-benefit analyses demonstrated weak results, which led to several switches in modes (LRT to BRT and then back to LRT), changes in route (shorter length, fewer stops) and procurement modality (PPP did not gain much traction).

In 2015 the Kazakh and the Chinese governments agreed to implement the project within the Belt Road framework. By then, its costs have increased to around USD 2 billion. The Akimat (Mayory) of Astana city concluded a direct agreement with a consortium of private Chinese companies for the design and construction of the project, to be financed out of a loan by China Development Bank of China (CDB).

The project has sparked much criticism due to its unrealistic traffic assumptions, inefficient route and enormous cost. In 2019 the Government cancelled the loan from CDB and ceased the construction. As of now, only 15% of the project is completed while bearing around USD 1.5 billion of debt. The project has an unclear future.
Given the scarcity of financial resources available to Kazakhstan in the future, the infrastructure financing needs should complement, not compete, with the country’s SDGs. Kazakhstan’s SDG investment needs linked to infrastructure, the lines marked grey on table 6 below, are among the largest. The projects that have been selected and structured with the careful consideration of SDGs can therefore achieve effects far greater than their direct commercial or economic benefits.

3. Procurement and implementation

Efficient and competitive process of public procurement is vital for the success of infrastructure projects, which are usually complex endeavors involving many technical, environmental, social and financial risks. The ability to ensure a competitive process is a prerequisite to efficient pricing, risk sharing and implementation of robust infrastructure projects. Another important factor to successful infrastructure projects is the ability to procure and monitor implementation on the basis of life-cycle costing principles.

In Kazakhstan, public procurement de-facto evolved in two streams: procurement by state bodies and agencies and procurement by quasi-state enterprises and SOEs. While the Public Procurement Law (PPL) mandates a fair amount of transparency and accountability for state bodies and agencies, which have concluded around USD 6 billion worth of contracts in 2017, the SOEs have procured more than double that amount – around USD 14 billion. Both streams combined account for 13% of GDP in Kazakhstan, which is relatively low compared to the OECD average, but it also represents 43% of government expenditures, which is above the OECD average, according to an assessment of public procurement systems in Kazakhstan.33

The latest 2018 Public Expenditure and Financial Accountability (PEFA) assessment rates Kazakhstan’s procurement methods at “D”. More than 80% of competitive tenders are registered as “failed” and then proceed to direct contracts, or so-called “single-source purchases”.34 The World Bank assessment also highlights various

<table>
<thead>
<tr>
<th>Goals</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social protection floor</td>
<td>0.88</td>
</tr>
<tr>
<td>Universal health coverage</td>
<td>0.48</td>
</tr>
<tr>
<td>Education</td>
<td>0.00</td>
</tr>
<tr>
<td>ICT</td>
<td>0.53</td>
</tr>
<tr>
<td>Transport</td>
<td>0.61</td>
</tr>
<tr>
<td>Climate-resilient infrastructure</td>
<td>0.66</td>
</tr>
<tr>
<td>Energy access &amp; efficiency</td>
<td>1.01</td>
</tr>
<tr>
<td>Biodiversity-related investment</td>
<td>0.57</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.72</strong></td>
</tr>
</tbody>
</table>

Source: ESCAP Economic and Social Survey of Asia and the Pacific 2019.

issues that hinder the participation of foreign bidders, such as the need for physical presence for registering in e-procurement systems, provision of bid bonds via only the local banks, and discounts for local content. As such, the existing procurement regime has a strong impact on whether private and foreign investors can operate in infrastructure markets on a competitive base with state-owned operators for infrastructure projects. State-owned enterprises and the competition regime with private sector can both significantly influence how much space is left for private domestic and foreign investment in infrastructure markets.

Another important drawback hindering the effective infrastructure investment is that the regulatory framework of the PPL does not provide for life-cycle costing principles (consideration of net present value with a combination of initial and operating cost) for objective and value-for-money decisions, which results in the lack of complex integrated contracts, such as DBO&M (design, build, operate and maintain) or EPC (engineering, procurement and construction).

B. PRIVATE FINANCING

After its independence in 1991, Kazakhstan underwent a massive transformation in all spheres of its infrastructure. There have been significant improvements in market liberalization, adoption of modern commercial regulation and private sector participation. Having undertaken significant reforms in power, transport and ICT, the country has attracted investments from multilateral infrastructure companies, such as Tractebel, AES Corp, and Malaysia Airports Holdings. Kazakhstan became regarded as one of the market reform leaders among the former Soviet Union countries.

Despite this progress however, many infrastructure reforms remain unfinished and some of them have even reversed. The density and capacity of infrastructure inherited from the Soviet times shifted the focus from long-term planning and foresight to the "social" considerations in short-term pricing of user fees. This policy of using administrative, command-style measures instead of market tools and signals to address the looming supply-demand gaps has wiped out the private investors from the infrastructure landscape and replaced them with the SOEs. The private financing in Kazakhstan’s infrastructure is therefore constrained by the state dominance and low commercial attractiveness of tariffs.

1. Tariff regulation

For more than a decade, Kazakhstan has been curbing the growth of tariffs across the whole specter of infrastructure assets in power, transport, public utilities, and ICT. Low utility tariffs are particularly true for electricity, heating and water. This not only disincentivizes conserving the resources, but also makes investments in water and energy saving unattractive. As a result, there is a chronic underinvestment in maintenance and replacement of assets and slow technological advancement. Moreover, this has had a negative effect on FDI. Many investors, such as AES Corp., Tractebel and Access Industries, have sold their assets and left Kazakhstan.

Inefficient tariff regulation, as stated by the EBRD’s recent report, is the main impediment to private investment, both debt and equity, in Kazakhstan’s utility sector. The current system is excessively bureaucratic. It does not allow utilities to reflect all their operating and investment costs in their
tariffs. The cost-plus principle used in the tariff setting limits the inclusion of the utilities' actual variable costs to the so-called “technical and technological norms”, and sets arbitrary standards of technical losses. These norms are usually significantly lower than the actual costs and cannot be fully covered by tariff revenues, leading to shortfalls in revenues.  

Despite the recent attempts to reform infrastructure tariff setting in Kazakhstan, the regulator is still viewed as politically motivated to suppress tariffs for reasons of social protection. For this reason, the introduction of incentive-based tariff regimes, which are supposed to provide infrastructure firms with greater discretion in their investment decisions, has not brought trust of either the investor community or banks, in the tariff setting process.

2. SOEs and privatization

SOEs still dominate the economy across the whole specter of infrastructure assets despite some early privatization efforts (see the section on SOEs above). They make the business environment unfriendly for the private sector. While SOEs find it easier to access the state-bank loans, access to finance is crowded out for the private enterprises. Low user tariffs can be tolerated by the state companies with their funding base and return requirements at around the sovereign risk-free rates. This stifles private investment and deters innovation across all infrastructure sectors where the state is dominant.

Samruk-Kazyna’s privatization program launched in 2016 has shown mixed results. The auctions did not attract the attention of foreign investors, while many sales were postponed multiple times. As a result, the share of public sector in the economy has not fallen. Of the 167 subsidiaries set for sale, only 27 are currently in the process. Should the privatization move forward, it will not only result in additional revenue for the public sector and smaller public spending, but may also attract new financing modalities, such as corporate debt, equity, project finance, and green bonds. Using local stock exchange for the privatization sales can also result in a revival of interest to the country’s capital markets and contribute to their development.

3. Banking sector

The legacy of non-performing loans after the 2009 crisis is still lingering. According to NBK, there has been a steady increase in the loan portfolio for the last three years. However, the share of non-performing loans (NPLs), defined as debts overdue for more than 90 days, has also increased by 0.7%. If this trend continues, there will be a significant impact on availability of funds, thus limiting potential loans to the future projects (see figure 18 below).

Interest rates are prohibitively high for most infrastructure projects. The local currency lending rate in Kazakhstan stood at 13.9% in August 2020. This is considered high for most infrastructure projects which usually require long-term debt. Moreover, there is a high volatility in the rates, which makes forecasting and risk mitigation unattainable (see figure 19 below).
Reliance on short-term funding and other structural and regulatory obstacles constrain banks’ ability to finance infrastructure projects. Uncertain economic prospects, along with structural and regulatory obstacles, have discouraged lending to the real economy. Banks currently hold more than KZT 10 trillion (USD 26.4 billion) of free liquidity, but most of it is short-term. High competition for deposits has led to a market in which most term deposits have low early withdrawal penalties and are effectively demand deposits. For this reason, Kazakh banks are unable to provide loans longer than 5 years, which is in most cases too short for infrastructure projects.

**Exchange rate is volatile.** The Kazakh Tenge is regarded as one of the most volatile currencies in the world (see figure 20 below). Episodes of sharp devaluations have eroded the confidence in local currency and undermined the appetite to lend in it.

**Figure 18:** Loan portfolio dynamics (KZT billion and %, 2020)

![Loan portfolio dynamics graph](image)


**Figure 19:** Lending rate, recent dynamics (% 2020)

![Lending rate graph](image)


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4. Capital market

One of the key signs that the equity market in Kazakhstan is not sufficiently developed is the repeated postponement of privatization IPOs, planned since 2016. The year 2020 saw yet another round of postponements to offer the shares of Kazakhstan Temir Zholy, KazMunayGaz, Air Astana, Kazakhtelecom, Qazaq Air, and Samruk Energy. The postponements, which have dampened investors’ confidence, are due to factors such as low liquidity of trading, and limited number of institutional investors with appetite for Kazakhstani assets.39 Although the government has been trying to encourage institutional investors’ formation, the nationalization of private pension funds has created a void in this area.

The range of investment opportunities is narrow. The level of capital market development is closely correlated to the depth of the institutional investor base, which supports liquidity and stability. Although the AIFC stock market has been active for the past two years, there have only been two IPOs listed, which is not sufficient to strengthen the capital market and attract funds for infrastructure investment.

C. PPP FINANCING

Despite the significant effort to enhance PPP project selection and implementation functions of the Government, there are still several issues that constrain Kazakhstan’s ability to generate interest among international infrastructure investors in PPP projects. There are several challenges that need to be addressed in order to overcome these issues.

National PPP strategy is unclear. Since the state program for Development of Public-Private Partnership 2011–2015 (the “PPP Program”), no further structured attempts have been made to bring a comprehensive plan of actions in this area. This lack of strategy resulted in a disproportionate use of PPP at the local level to avoid public procurement and implement projects on the basis of direct negotiations (Chikanayev, 2020).

The complex bureaucratic approval process and deficiencies of the bidding

process present risks to both investors and grantors. An UNECE study indicates that projects at the local level suffer from lack of clarity and grantor accountability in their tender procedures. Initial decisions on the choice of delivery mode are made by line ministries at a very early stage in the planning process, typically before feasibility studies. While the Kazakhstan PPP Centre performs value-for-money analysis at later stages of project development, major modifications to the choice of delivery mode are frequent and costly further down the project preparation pathway. It is therefore critical to ensure that sufficient analytical effort is exerted to evaluate various options before a decision on the use of PPP is made.

Despite continuous changes in the PPP legislation, some areas still require improvement. The current legislation still creates confusions around determining a public partner/concession grantor and which assets may be identified for legal recourse by a private partner/concessionaire (Chikanayev, 2020). There have been already three PPP laws developed over the 30 years of independence and none of them resulted in operational and successful PPP environment, failing to fit with international standards (UNECE, 2013). The overlap between the current two laws, the Concessions Law and the PPP Law, combined with too broad a definition of PPP, could result in confusion among contracting authorities, especially at the regional level. As a result, a PPP modality is being implemented for sectors and projects where it may not be the most appropriate instrument.

The decision to use PPPs as a delivery model appears to be based primarily on the budgetary considerations of line ministries and regional authorities. Given the imminent budgetary pressures facing all levels of government amid the COVID-19 pandemic, this approach may result in an inappropriate use of the PPP delivery model on some occasions, and the accumulation of PPP-related liabilities. The financing of PPPs represents a major challenge in Kazakhstan.
This section aims to suggest the policy recommendations and the possible impacts thereof, from the point of the view of the financing opportunities and modalities that they could potentially unlock. Each modality would relate to either public, private or PPP financing. This section concludes with a more detailed description of the additional modalities that the recommendations can potentially unlock.

A. POLICY RECOMMENDATIONS

Recommendation 1: complete the commercial regulation and tariff reform

Lack of transparency and predictability in the infrastructure tariff regulation is regarded as the greatest impediment to investment in Kazakhstan’s infrastructure sector. Low tariffs make private sector financing unattractive, and public financing inefficient. Completing the previously initiated reform of commercial regulation in the infrastructure sector could potentially unlock several modalities for private sector investment, optimize public sector expenditure and allow for better use of PPPs. The main areas for reform could potentially have the following effects and unlock the following modalities:

<table>
<thead>
<tr>
<th>Recommendation and action</th>
<th>Impact</th>
<th>Unlocked financing modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of centralized industry regulators designated for each key infrastructure sector:</td>
<td>Greater investors’ trust in commercial regulation</td>
<td>Private finance: equity and commercial debt</td>
</tr>
<tr>
<td>power, transport, water, etc.</td>
<td></td>
<td>PPP: private debt</td>
</tr>
<tr>
<td>Ensuring their independence from the social policy of the Government</td>
<td>Better prospects for successful privatization</td>
<td>Public finance: state revenues</td>
</tr>
<tr>
<td>Setting up incentive-based long-term tariff setting mechanisms and procedures</td>
<td>Increase in user fee revenues</td>
<td>Public finance: state revenues</td>
</tr>
<tr>
<td></td>
<td>More efficient use of public expenditure</td>
<td>Public finance: optimized public spending</td>
</tr>
<tr>
<td>Defining clear and transparent mechanisms for demand-side subsidies to support socially</td>
<td>Greater commercial attractiveness</td>
<td>Private finance: equity and commercial debt</td>
</tr>
<tr>
<td>vulnerable citizens</td>
<td></td>
<td>PPP: private debt</td>
</tr>
</tbody>
</table>
Recommendation 2: reduce state ownership

Evidence shows that effective privatization programs around the world have brought higher economic efficiencies to the privatized companies. The quest for profits incentivizes inefficient businesses to cut costs. Combining privatization with deregulation, and the introduction of policies to allow more firms to enter the sector and increase competitiveness (see Recommendation 1 above) could result in an even greater economic benefit from privatization. In essence, if privatizations result in the increase in competition, they will bring operational and financial efficiencies. This, in turn, will attract additional financing modalities as below:

<table>
<thead>
<tr>
<th>Recommendation and action</th>
<th>Impact</th>
<th>Unlocked financing modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the privatization of infrastructure assets</td>
<td>Greater fiscal space for other priorities</td>
<td>Public finance: more is available for projects with lower commercial attractiveness or where tariff affordability is insufficient</td>
</tr>
<tr>
<td></td>
<td>More private investment and FDI in the infrastructure sector</td>
<td>Private finance: equity and commercial debt</td>
</tr>
<tr>
<td></td>
<td>Innovation and efficiency</td>
<td>Private finance: increased use of capital markets</td>
</tr>
</tbody>
</table>

Recommendation 3: tie infrastructure development to SDGs and improve investment planning

Infrastructure is at the very heart of efforts to meet the Sustainable Development Goals (SDGs). According to Thacker et al. (2019), infrastructure either directly or indirectly influences the attainment of 72% of targets on all SDGs. However, if poorly planned, infrastructure is also a potential threat to them. It can have harmful impacts on people’s health (SDG3), on aquatic and terrestrial ecosystems (SDGs 14 and 15), and destroy culturally important sites (SDG11). Carbon-emitting infrastructure threatens the achievement of the carbon budgets agreed in the Paris Agreement (SDG13). Thus, there are synergies between infrastructure systems and the SDGs.

Aligning infrastructure investments with the SDGs can also unlock additional financing modalities which were either unused or underused in Kazakhstan to-date, as presented below:

Scott Thacker, Daniel Adshead, Marianne Fay et al, Infrastructure for Sustainable Development, Nature Sustainability, 2019
### Recommendation and action

<table>
<thead>
<tr>
<th>Recommendation and action</th>
<th>Impact</th>
<th>Unlocked financing modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate the SDGs targets into the state program planning related to infrastructure investment</td>
<td>Greater economic, environmental and social impact from infrastructure projects</td>
<td>Public finance: greater access to international development finance from IFIs</td>
</tr>
<tr>
<td>Introduce ESG assessment into project selection and assessment mechanisms</td>
<td>Better environmental and social risk management from infrastructure projects</td>
<td>Public Finance: access to global climate finance (see section below)</td>
</tr>
<tr>
<td>Allow for project procurement on the life-cycle costing principles</td>
<td>Greater competition</td>
<td>PPP: private commercial debt and bonds</td>
</tr>
</tbody>
</table>

**Recommendation 4: develop capital markets and local currency financing**

The recent emphasis on the importance of innovative financing approaches in addressing the emerging infrastructure investment challenges is dependent on the presence of effective capital markets. Most of the proposed modalities are normally tied to the access to an efficiently functioning stock exchange. For example, green bonds, credit enhancement instruments, and Islamic finance all require a certain level of liquidity of financial instruments that represent them. Infrastructure projects in Kazakhstan, be they originated by the state or the private sector, are starved of long-term local currency denominated debt. Banks alone, still struggling to recover from the past crises, are not capable of closing that gap. The development of capital markets is therefore one of the most crucial steps to unlocking the additional innovative modalities in infrastructure finance.

<table>
<thead>
<tr>
<th>Recommendation and action</th>
<th>Impact</th>
<th>Unlocked financing modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a long-term strategy to restore institutional investor base</td>
<td>Greater liquidity and access to long-term local currency-denominated debt</td>
<td>Private finance: infrastructure bonds, green bonds, Islamic finance, etc</td>
</tr>
<tr>
<td>Introduce conditions for NFRK and the Pension Fund to invest in robust infrastructure projects/ assets with a clear intergenerational impact</td>
<td>Greater liquidity and access to long-term local currency-denominated debt</td>
<td>Public Finance: direct use of intergenerational funds</td>
</tr>
<tr>
<td>Introduce state credit enhancement instruments for green infra issues</td>
<td>Longer tenors; lower interest rates</td>
<td>PPP: access to international institutional investors</td>
</tr>
</tbody>
</table>
B. ADDITIONAL FINANCING MODALITIES

1. National Fund of the Republic of Kazakhstan (NFRK)

The NFRK was created in 2000 to serve as a stabilization and savings facility through accumulation of excess oil revenues. It has proven to be a crucial savings tool, smoothing the effects of oil price volatility on public finances and supporting targeted capital spending. The reserves that the Fund has amassed to-date also serve as a collateral to external borrowing. By end-2020, NFRK assets are projected to decline to about USD 57 billion from USD 62 billion in 2019 (34% of GDP), mainly underpinned by the fall in oil revenues and a need for additional counter-cyclical transfers approved to support pandemic-related public finances.41

The key principles governing the Fund have been set in the “Concept for the Formation and Use of the National Fund” adopted in 2016. The document lists 4 main rules limiting the size of transfers to the budget:

1. Upper monetary limit on the amount that can be transferred from the National Fund to the republican budget (KZT 2,000 billion per annum by 2020)
2. The total value of the NFRK should not drop below 30% of GDP.
3. Total public debt, including the debt of SOEs, should not exceed the assets of the NFRK.
4. Annual expenditures on public debt service do not exceed 4.5% of assets managed.

The Concept also explicitly forbids the Fund to invest in domestic securities issued by the government, quasi-government or private sector.

Targeted transfers can be made by a presidential decree for socially significant projects if alternative funding sources are insufficient. For example, during 2014-2015, the Government has approved targeted transfers of USD 5.4 billion to support the banking sector, to fund SME bank lending and to finance infrastructure projects. During 2015-2017, the annual transfers of USD 3 billion funded the budget expenditures of the “Nurly Zhol” state program. Given its long-term nature, the Fund could be ideally placed to invest in priority infrastructure projects with intergenerational impacts. However, outside of the targeted budget transfers as defined in the 2016 Concept, there is no mechanism allowing it to invest in local infrastructure assets or projects.

2. Regional cooperation and integration

Among the numerous regional cooperation initiatives, Central Asia Regional Economic Cooperation (CAREC) Program is the one that has brought Kazakhstan the most benefits in terms of transport projects. As a partnership of 11 countries and development partners working together to promote development through cooperation, CAREC has mobilized USD 39.2 billion in investments that have helped establish multimodal transportation networks, increase energy trade and security, facilitate free movement of people and freight, and provide the groundwork for economic corridor development. The forthcoming CAREC 2030 strategy is expected to support the transformation of Kazakhstan’s transport

corridors into economic corridors, and opening new trade and business opportunities across Central Asia.

Kazakhstan has become a member of the Transport Corridor Europe Caucasus Asia (TRACECA) Program in 2007. Since then it has benefitted from technical assistance and investment projects financed by the initiative in road transportation, railways and logistics terminals. Although a majority of projects financed by TRACECA lay outside of Kazakhstan’s territory, the initiative will significantly improve global connectivity and transit potential of the country.

The projects being implemented under the BRI will help enhance Kazakhstan’s role as the regional economic hub (see the respective section above). This is possible through its transit and logistical infrastructure, which can generate positive externalities and regional public goods and connect Central Asian countries with each other and with neighboring regions.

Finally, Kazakhstan joined the Eurasian Economic Union in 2014, and the World Trade Organization in 2015. It also intends to join the Organization for Economic Cooperation and Development (OECD) as a full member. These organizations primarily bring technical assistance and knowledge sharing relating to the issues of better regulatory environment in transport, regional energy trade, logistics, etc.

3. Climate finance

The Climate finance framework provides a great opportunity to Kazakhstan, especially in terms of promotion of green economy, low-carbon growth, and energy efficiency. Kazakhstan has access to climate finance through such funds as:

1. Global Environment Facility (GEF) comprises 182 member countries and provides grants to projects related to biodiversity, climate change mitigation and adaptation, land degradation, the ozone layer, and persistent organic pollutants.

2. Climate Investment Fund (CIF) provides new large-scale financial resources to invest in clean technology projects, which are based on low-carbon technologies.

3. Green Climate Fund (GCF), as a source of financing to support building climate-resilient infrastructure is available to the Least Developed Countries (LDC). Although Kazakhstan is not a LDC, the Fund supports its renewable energy projects by providing blended finance to the EBRD and facilitating policy dialogue and regulatory improvements.42

Green bonds are debt instruments for “green economy” infrastructure. Currently, EBRD and World Bank are the largest issuers of green bonds globally. Green bonds are channeled through the securitization of project finance loans in local bond markets. Box 5 below demonstrates the possibility of structuring such issues on AIX:

4. Islamic finance

NBK estimates Islamic financial instruments in Kazakhstan as a mere 0.21% of the total banking sector assets in Kazakhstan. However, globally, according to the estimates of AIFC, this segment now amounts to over USD 2.5 trillion and is expected to reach USD 3.8 trillion by 2023, accounting for 1% of the world’s total financial markets assets. Islamic banking represents the largest segment (estimated at USD 1.7 trillion or 70% of total Islamic finance assets). The Islamic insurance industry (takaful) and

42 [www.greenclimate.fund/countries/kazakhstan#](www.greenclimate.fund/countries/kazakhstan#).
capital markets have shown strong growth as well.

**Kazakhstan has concentrated its efforts in the development of Islamic finance using the platforms of AIFC.** Islamic finance is primarily viewed as an alternative source of financing for state and private utility projects. For this purpose, a special regulatory and legal regime has been set up in the AIFC that is consistent with international best practices and standards. AIFC’s Islamic finance industry includes a range of participants, including Islamic banks, asset management companies, investment funds, takaful and re-takaful companies other Islamic financial organizations, and leading international Islamic financial institutions.43

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**Box 5: The Damu Green Bonds on AIFC**

On August 11, 2020 Damu Entrepreneurship Fund JSC, in partnership with the UNDP, has registered green finance bonds on the AIX, the stock exchange of AIFC. The initiative was part of the measures to de-risk investments in renewable energy. AIFC supported the issue by providing a Second Party Opinion. The proceeds will be placed among second-tier banks and microfinance organizations who would in turn on-lend them to the SMEs implementing investment projects related to RES. UNDP will also partially subsidize the approved borrowers’ interest to Damu Fund under the program and support in the evaluation and selection of eligible RES investment projects.

The Fund has raised KZT 200 million (USD 478,469) with a maturity of 36 months and a coupon rate of 11.75%. The placement was the first listing of securities that comply with the AIFC green bond rules and the first such in Kazakhstan.

Sources: https://aifc.kz/press-relizy/damu-fund-has-listed-the-first-green-bonds-on-aix/.
6. Conclusion and Recommendations

This report examined the current state, challenges, and opportunities in infrastructure financing in Kazakhstan, with focus on transportation, power, ICT and water sectors.

Current State: Kazakhstan has been able to largely keep up with its infrastructure investment needs. It has predominantly financed its transportation projects by the state programs and loans from development institutions. Private investment in renewable energy is regaining momentum amid supports from the government. ICT has seen mixed financing, with private companies financing the final stretch of infrastructure to customers and the Government – the main lines of large capacity. PPP is yet to pick up the speed, with a single large-scale project reaching financing close in 2020. Local banks do not contribute beyond short-term working capital facilities to private utility operators.

Challenges: Although there seems to be ample fiscal space to cover the future investment needs, the imminent economic contraction caused by the pandemic will dampen public finance. At the same time, part of fiscal resources allocated for infrastructure development could be redirected to social supports. In this regard, careful selection, assessment and preparation of infrastructure projects, with their alignment with SDGs, will become essential. Improving procurement practices could also result in a better value for money.

Banking sector is still largely an outsider on Kazakhstan’s infrastructure financing landscape. Access to local funding for infrastructure projects is also thought to be crowded out by the dominant SOEs with their ability to tolerate lower profits and higher interest rates. Improvements in commercial regulation practices for the entire infrastructure sector are long overdue.

Despite setting up state-of-the-art trading platforms and opening common-law courts, capital markets are yet to attract investors and present a diverse array of investment opportunities. However, they are vital to the ability of infrastructure projects, both public and private, to raise affordable financing. Similarly, PPP modality is yet to gain momentum, as it struggles with heavy bureaucracy, complicated legislation, and blurred accountability in the decision-making process.

Opportunities and Modalities: Kazakhstan has been able to diversify its infrastructure financing sources to some extent. However, a whole new array of financing modalities has recently emerged on the global landscape, such as green bonds, Islamic finance instruments, and infrastructure bonds. Accessing them will require transparent and predictable commercial regulation, participations of the private sector in the management of infrastructure assets, adoption of ESGs, and alignment of investment with SDGs.

The main focus should therefore be on the development of capital markets and instruments that would allow infrastructure projects and companies to tap, in a safe and
prudent manner, into the intergenerational funds, international institutional investors, the emerging green finance pools, and local-currency borrowing. Although various challenges remain in financing infrastructure projects in Kazakhstan, most can be overcome by consistent and effective policies by the government, which will increase capacities of both public and private sectors to finance infrastructure projects.
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