Country Profiles on the Housing Sector

Republic of Kazakhstan
NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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The Country Profiles on Housing and Land Management (CPs) are intended to assist governments to improve the performance of their housing, urban development and land management sectors and, at the same time, to promote sustainable development. The profiles analyse trends and policy developments, and make an overall assessment of the political, economic and social framework of these sectors in a country. This work was initiated by the United Nations Economic Commission for Europe (UNECE) Committee on Housing and Land Management in the early 1990s, in response to requests from ECE member States.

The studies are requested by member States and carried out by international teams of experts in cooperation with government bodies, other international organizations, non-governmental organizations, local authorities and the private sector. Through a process of broad consultation, the experts undertake a comprehensive review of the housing, urban development and land management sectors, and develop recommendations to help policymakers draft strategies and programmes.

This Country Profile of Kazakhstan, prepared at the request of the Government of Kazakhstan, is the twentieth in the series. The Country Profiles programme continues to emphasize in-depth analysis and policy recommendations, while focusing on specific challenges or achievements in the housing, urban development and land administration sectors that are particularly relevant to the country under review. The Country Profile of Kazakhstan specifically focuses on the housing sector, specifically on issues of housing provision and affordability; management and maintenance of the housing stock; energy efficiency in housing; housing finance; smart sustainable cities and the legal and institutional framework.

This Country Profile lays out a set of policy recommendations. Their timely and effective implementation is regarded as crucial to meeting the challenges, which Kazakhstan currently faces. With the recent adoption of the New Urban Agenda, the global commitment to sustainable urban development has been reaffirmed. The policy recommendations of this Country Profile will serve to support the country in its commitment to implementing the New Urban Agenda and achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development, particularly SDG11 on cities and communities.

I would like to thank the international and national experts who contributed to the preparation of this CP, the governments that provided funding for its development, UN partner organisations who were involved in the preparation of the study – UN-Habitat and UN Development Program (UNDP) in Kazakhstan. I invite all those with an interest in Kazakhstan’s housing sector to make full use of the information and recommendations contained in this report. It can serve as a framework for future action, and help shape programmes at the national and local levels.

Finally, I would like to stress the relevance of the country profile reviews as unique instruments that allow ECE countries to share experiences in housing, urban development and land management issues, to compare trends and gain knowledge from different practices, to adopt policies and planning tools, and to learn about actions implemented.

Olga Algayerova
Executive Secretary
United Nations Economic Commission for Europe
This Country Profile on the housing sector of Kazakhstan was requested by the Government of the Republic of Kazakhstan through its Ministry of Regional Development. The Review began in July 2016 with the preparatory mission by the UNECE secretariat, during which the final structure of the Country Profile was established. A fact-finding mission by the international expert team was carried out in September 2016.

The project’s expenses were covered by extrabudgetary funds provided by the Russian Federation. The Government of the Republic of Kazakhstan made national experts available for the study. The UN-Habitat Office in Moscow financed the participation of an international expert. The UNDP Country Office in Kazakhstan contributed in part to other expenses and provided input to the report, in particular on energy efficiency in the housing sector. The successful conclusion of the project would not have been possible without this generous support.

This Country Profile does not cover the land administration and management part. Owing to a recent Urban Policy Review that the Organisation for Economic Co-operation and Development has prepared, an analysis on urban development was excluded in the Country Profile to avoid duplication of task.


Other UNECE publications related to housing may also prove useful to Kazakhstan and other countries in transition: (a) Social Housing in UNECE region: Models, trends, and challenges (ECE/HBP/182, 2015); (b) Good practices for Energy-Efficient Housing in the UNECE Region (ECE/HBP/175, 2013); (c) Climate Neutral Cities: How to make cities less energy and carbon intensive and more resilient to climatic challenges (ECE/HBP/168, 2011); (d) Green Homes: Towards energy-efficient housing in the United Nations Economic Commission for Europe region (ECE/HBP/159, 2009); (e) Self-Made Cities: In search of sustainable solutions for informal settlements in the United Nations Economic Commission for Europe region (ECE/HBP/155, 2009); (f) Guidelines on social housing: principles and examples (ECE/HBP/137, 2006); (g) Housing finance systems for countries in transition: principles and examples (ECE/HBP/138, 2005); (h) Guidelines on condominium ownership of housing for countries in transition (ECE/HBP/123, 2003).

In addition, the fundamental documents approved by UNECE member States could provide a framework for developing sustainable policies in housing, urban development and land administration and management: the Geneva UN Charter on Sustainable Housing and the Strategy for Sustainable Housing and Land Management in the ECE region for the period 2014-2020.

This Country Profile and other related publications are available on the UNECE website (http://www.unece.org/housing.html).
The final publication should be considered as a joint effort of the:

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Republic Association of Cooperatives of Homeowners
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### ABBREVIATIONS AND ACRONYMS

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>CCHCS</td>
<td>Committee on Construction, Housing and Communal Services</td>
</tr>
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<td>CHO</td>
<td>co-operative of homeowners</td>
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<tr>
<td>FDI</td>
<td>foreign direct investment</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
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<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
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<tr>
<td>GHG</td>
<td>greenhouse gas emission</td>
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<td>HAI</td>
<td>housing affordability index</td>
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<td>HCSB</td>
<td>Housing Construction Savings Bank</td>
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<td>HGF</td>
<td>Housing Guarantee Fund</td>
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<td>ICT</td>
<td>information and communication technology</td>
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<tr>
<td>IT</td>
<td>information technology</td>
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<tr>
<td>ITU</td>
<td>International Telecommunications Union</td>
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<tr>
<td>JSC</td>
<td>Joint-stock company</td>
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<tr>
<td>LEA</td>
<td>local executive authority</td>
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<tr>
<td>LED</td>
<td>light-emitting diode</td>
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<tr>
<td>KMC</td>
<td>Kazakhstan Mortgage Company</td>
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<td>KPI</td>
<td>key performance indicator</td>
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<td>KZT</td>
<td>Kazakhstani tenge</td>
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<tr>
<td>MFO</td>
<td>micro-finance organization</td>
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<tr>
<td>MoNE</td>
<td>Ministry of National Economy</td>
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<td>NBRK</td>
<td>National Bank of the Republic of Kazakhstan</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PPP</td>
<td>public-private partnership</td>
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<tr>
<td>R&amp;D</td>
<td>research and development</td>
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<tr>
<td>RSE</td>
<td>Republican State Enterprise</td>
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<tr>
<td>SHPP</td>
<td>small hydro power plant</td>
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<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
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<tr>
<td>SPAIID</td>
<td>State Programme for Accelerated Industrial Innovative Development</td>
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<tr>
<td>STB</td>
<td>second-tier bank</td>
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<tr>
<td>TNC</td>
<td>transnational corporation</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNDP-GEF</td>
<td>UNDP-Global Environmental Facility</td>
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<tr>
<td>U4SSC</td>
<td>United for Smart Sustainable Cities</td>
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<tr>
<td>USD</td>
<td>United States dollar</td>
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### SYMBOLS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Gcal</td>
<td>gigacalorie</td>
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<tr>
<td>km</td>
<td>kilometre</td>
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<tr>
<td>km²</td>
<td>square kilometre</td>
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<tr>
<td>kW</td>
<td>kilowatt</td>
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<tr>
<td>kWh</td>
<td>kilowatt-hour</td>
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<tr>
<td>m²</td>
<td>square metre</td>
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<tr>
<td>mm</td>
<td>millimetre</td>
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CURRENCY CONVERSION

Exchange rate (September 2016)

1 Kazakhstani tenge (KZT) = 0.0029 United States dollar (USD)
   1 USD = 341.50 KZT
   1 Euro (EUR) = 381.12 KZT
EXECUTIVE SUMMARY

This summary provides an overview of the housing and urban development sectors in Kazakhstan and policy recommendations of the study.

General situation

Kazakhstan is the largest landlocked country in the world. In terms of surface area, it is the world’s ninth largest and 99.1 per cent of it is land. Kazakhstan’s population density is relatively low at 6.6 persons per square kilometre.

Kazakhstan’s economy is largely based on oil and its commodities. While this has boosted growth, lack of diversity of the economic activities makes it highly vulnerable to change in demand for and prices of oil commodities. The commodity price boom in the 2000s, along with government economic reforms, has triggered strong growth; in the late 2000s, however, this growth was slowed by impacts of the global economic and financial crises and the drastic decrease in commodity prices.

Economic diversification and sustainable growth remain key challenges for Kazakhstan. Understanding their importance, various strategies and programmes were developed to address them. In particular, the five-year “State Programme of Accelerated Industrial and Innovative Development of Kazakhstan” (SPAIID) was adopted in 2010. The SPAIID contains the key tasks to achieve the goal of guaranteeing a stable and well-balanced economic growth by means of diversification and improving the competitiveness of the economy.

Significant economic growth since 2002 has brought down poverty incidence from 46.7 percent level in 2001 to 2.7 per cent in 2015. However, the urban-rural poverty gap is still high. In 2006, Kazakhstan has gained upper-middle-income status.

With growth slowing down since 2011 and the global economy remaining volatile, Kazakhstan launched an ambitious programme “100 Concrete Steps, a Modern State for All” in May 2015, to implement institutional and structural reforms. The programme specifies five institutional reforms and outlines the approaches on how to implement them. Despite progress made on the implementation of short and long-term initiatives and reforms, a number of challenges remain, such as attraction of private investment and completion of reforms in all economic sectors.

Housing legislation and policies

The Constitution of Kazakhstan states that the right to housing is inviolable and that citizens in need of housing should be provided with housing at an affordable price from the State housing funds in accordance with the norms stipulated by law. Kazakhstan has a number of laws and regulatory acts on housing issues. The 1997 law “On Housing Relations” is the main regulatory instrument in the field of housing. The law was revised several times since its adoption.

The country’s housing policy is aimed at creating conditions for the provision of affordable housing. Housing construction is one of the priority directions of Kazakhstan’s “Strategy for Development until 2030” (Strategy 2030). A number of state programmes for housing construction and for financial support of lower income population aimed at increasing housing affordability were elaborated by the government. Since 2005, Kazakhstan has adopted housing
construction programmes in line with the strategy, although with differing priorities. This included state bi-annual programmes for housing construction (separate programmes for years 2005–2007, 2008–2010 and 2011–2014); the programme on the development of the regions until 2020 (which included a specific objective on construction of affordable housing); the programme of housing construction “Nurly Zher” was adopted at the end of 2016. The Nurly Zher Housing Construction Programme (Nurly Zher) is therefore the latest initiative of the government to address housing affordability. It combines the housing-related objectives of two other programmes – the Regional Development Programme 2020 and the Nurly Zhol Infrastructure Development Programme for 2015-2019.

The Ministry for Investments and Development is the executive body managing development of the housing and communal services sector. It is responsible for formation and implementing the country’s housing policy. The ministry has a wide range of tasks and responsibilities over the housing sector. A number of tasks on housing development were delegated in Kazakhstan to regional and local authorities. There are also a number of companies established by the Government which support housing construction. For instance, the JSC “National Management Holding “Baiterek” is one of the institutions responsible for increasing the availability of housing through its subsidiaries by providing loans for the population, guaranteeing housing construction and subsidizing mortgage loans for the population. The “Kazakhstan Center for modernization and development of housing sector”, a company established in 2009, is responsible for promoting sustainable housing through research and training on housing management.

While the institutional framework for the housing sector is diverse, including the national, regional and local organisations working on affordable and decent housing, it is important to ensure effective coordination between different agencies, especially the vertical coordination – between organisations working at municipal and national levels.

**Housing demand**

After gaining independence in 1991 from the Soviet Union, housing construction in Kazakhstan significantly decreased. This was due to the disruption of the country’s close economic links with other ex-Soviet republics, and especially Russia, after the dissolution of the Soviet Union. This low level of housing construction was followed by a strong growth in the mid-2000s. This was largely due to the easing of mortgage regulations and introduction of several housing construction programmes since 2005 with the active participation of private developers and individuals. The trend was halted by the 2008 global economic and financial crisis, but the Government’s support has prevented the housing construction industry from collapsing totally. The government housing construction programmes, and first of all the Nurly Zher programme, aim to increase housing availability for the population through the construction and financing of affordable rental housing and housing for members of the housing construction savings system.

There are positive results in the implementation of housing construction programmes. At the same time, Kazakhstan is experiencing housing shortages, and affordability is still an issue. The ongoing population growth and migration to cities due to the urbanization process necessitate finding new innovative solutions to existing housing affordability challenges.

Housing construction finance has been recognized as a promising area by the Nurly Zher government programme. The programme is aimed at providing comprehensive solutions to housing challenges of various segments of population through the implementation of 5 main objectives:
- To construct rental housing for socially vulnerable groups of citizens;
- To advance individual housing construction;
- To construct mortgage housing through housing construction savings system;
- To encourage housing construction by private developers;
- To increase affordability of mortgage lending.

Development of a rental housing stock for socially vulnerable segments of population has been recognized as a promising area of housing construction. The completed rental housing (with no purchase option) will be provided on a first-come first-served basis pursuant to the housing legislation of the Republic of Kazakhstan.

Definition of target groups of government support to affordable housing provision needs further discussion. The state housing policy is today mainly aimed at solving housing problems of few specific socially vulnerable categories of the population, such as, military staff or government employees. The lower middle class population which does not fit these requirements, cannot afford to purchase housing and in the context of the absence of a developed market of rental housing in Kazakhstan, this large group of population has a very limited access to affordable decent housing.

In Kazakhstan, social housing is housing from the municipal (public) stock, and the right to it is not always associated with low income of households. The number of people requesting public housing, including those with higher incomes, is growing; and as of 2018, four hundred seventy three thousand nineteen people are registered on the waiting lists of local executive authorities (LEAs) of regions (akimats), among them two hundred sixty five thousand fifty three are socially vulnerable (including orphans and second World War veterans). The international practice today demonstrates that the 2008 economic crisis has made housing unaffordable for many low-income as well as middle-class households.

**Housing maintenance and management**

Pursuant to Article 6 of the Law “On Housing Relations”, the homeowners shall manage the housing stock directly or through appointed (elected) authorities. A cooperative of homeowners (CHO) is a non-profit organization established by homeowners to manage and maintain common areas. According to the law, CHOs can to manage more than one apartment building. CHOs managing multiple multi apartment buildings are predominant in Kazakhstan. CHOs involve themselves both in the management and maintenance of apartment buildings although the law requires separation of these functions and making contracts with service companies for maintenance of apartment buildings. There are challenges in management, maintenance and refurbishment of multi-family houses because CHOs, dominating this sphere, do not have professionally trained staff in common property management. The system of training of professional managers of multi apartment buildings is being developed.

The fee for the maintenance and refurbishment of the common property of condominiums is not enough to ensure all activities required for maintenance of an adequate condition of apartment buildings, energy retrofitting. There is no practical enforcement of requirements of the Law on Housing Relations with regard to the payment of mandatory contributions for refurbishment by homeowners.

The government-supported refurbishment of apartment buildings is carried out based on available state budget. There are no market-based mechanisms for lending to capital repairs
and modernization of apartment buildings. As a result, there is a lack of funds to ensure good conditions of apartment buildings and their modernisation.

**Energy efficiency and energy saving in the residential sector**

Kazakhstan is located in harsh climate conditions with very cold winters. In Kazakhstan, the residential sector is the largest consumer of heat and electric power. Residential buildings consume about 13.6 per cent of electric power and 40 per cent of heat power. The majority of the country’s housing stock consists of apartment buildings built in the period 1950-1985, and because of age and lack of maintenance, they are not energy efficient. The low energy efficiency in the residential sector is also due to the absence of the working mechanisms in managing multi-apartment buildings, as described above. Most of the apartment buildings in the existing housing stock use district heating and energy supply systems. A mass energy audit conducted in 2010-2013 showed that heat energy consumption of apartment buildings in Kazakhstan is 240 kW per m² every year, which far exceeds heat consumption of countries like Sweden, Germany, France, and England.

The government of Kazakhstan established energy efficiency and energy saving as its top priorities. The political will of the country to promote energy efficiency is expressed in a number of strategic documents adopted by the Government such as the “Concept for the Transition to a Green Economy” and “Strategy 2050”, and in programmes like “Nurly Zhol”, “100 Concrete Steps”, “Energy Efficiency 2020”, etc.

Providing legislative support to the country’s efforts to improve energy efficiency and energy saving is the Law “on Energy Saving and Energy Efficiency Improvement” (Law on Energy Efficiency), which was adopted in 2012 to serve as the central document in the field of energy efficiency. The Law on Energy Efficiency has introduced thermal modernization as an activity to improve the thermal and technical specifications of buildings that will in turn reduce heat losses. This law set a requirement to indicate the energy efficiency class of a constructed object in the technical sheet of the constructed property during registration of rights. For existing buildings, an energy audit will be conducted to determine their energy efficiency class. Customers and contractors will be more interested in investing if the energy efficiency requirements (by specifying the energy efficiency class of a building) are set prior to construction. A State-appointed authority should monitor every stage of construction to ensure that the requirements are implemented and met.

The Law on Energy Efficiency contains provisions for the possibility to assist and support the owners of residential buildings for the activities promoting energy saving and improving energy efficiency in line with the Law on Housing Relations. There is also a provision indicating the consumer tariffs for heat energy supply, depending on the availability of heat metering devices.

Energy efficiency issues are within the competence of different government bodies, in particular, the Committee on Construction, Housing and Communal Services and the Committee on Industrial Development and Industrial Safety of the Ministry for Investments and Development. These government bodies are the competent authorities in the field of architecture, town planning and construction, and in the field of energy saving and energy efficiency, respectively.

The international community takes part in improving energy efficiency in Kazakhstan. Since 2007, the United Nations Development Programme (UNDP), with the support of the Government and other donors, has been implementing energy efficiency and energy saving projects. UNDP also supported the drafting of the Law on Energy Efficiency.
Issues of energy efficiency of residential buildings are therefore related to the implementation of the already existing government policy priorities on energy efficiency and further development of the regulatory framework for energy efficiency in managing multi-apartment buildings.

**Financial framework of the housing sector**

*Trends in the housing market*

With the transition to a market economy after gaining independence, the housing finance policy of Kazakhstan has changed. There was a shift from distribution of public housing stock where the State was the main source of financing, to acquisition of housing at people’s own expense. In 1993, in line with the Presidential Decree “on New Housing Policy”, a State programme to reform the housing sector and its finance systems defined the new role of the State in the housing sector. The programme envisaged reducing the State’s role in this sector to indirect management through development of a system of fiscal and economic instruments, and establishment of basic housing market institutions and their legislative regulation.

Mortgage lending was first introduced in 1995 but the lending conditions were not favourable to the public. In 1995-2000, the Government, together with the National Bank of the Republic of Kazakhstan (NBRK), has worked on forming the necessary legislative base and infrastructure for mortgage lending. In 2000, the “Law on Housing Constructions Savings” was adopted and the joint-stock company Kazakhstan Mortgage Company (KMC) was founded. The KMC was tasked to refinance mortgage loans issued by banks to increase affordability of housing for the population. This mechanism was aimed at ensuring a rapid return of credit resources and addressing the liquidity problems of financial institutions involved in mortgage lending. The KMC is the primary implementing institution of public housing programmes.

In 2001, the mortgage market started to develop although mortgage lending was still not affordable to the majority of households. The Government developed a state programme for 2005-2007, which aimed to construct affordable housing and, subsequently, sell the property to people belonging to low income and socially protected groups at preferential mortgage rates. This has resulted in a high level of activity in the construction sector.

The profound effect of the global crisis on the mortgage market put a stop to a large number of construction projects. In order to stabilize it and help those citizens who invested in the frozen construction projects, the Government invested a significant amount of financial resources to facilitate the completion of the projects, refinanced foreign currency mortgage borrowings through second-tier banks, and adopted some measures to ensure social and economic stability, including a devaluation of its currency. The mortgage market slowly recovered during 2011-2014, along with the housing construction market. Kazakhstan experienced again a financial crisis at the end of 2014, and a more serious devaluation of the national currency took place. The latest crisis has caused a significant reduction in demand in the real estate market and sharp decline in the volume of mortgage lending and financing of housing construction.

*Access to housing finance*

The Government has been implementing various mechanisms to increase the availability of housing finance and improve lending conditions. A large amount of the state budget is invested in the housing sector but its share in the total funding is less than 10 per cent. The Government has been implementing different state programmes to ensure access to affordable housing. Despite the achievements of these state housing programmes, housing is still inaccessible for
According to the Ministry of National Economy, around 71.4 per cent of the economically active population could not afford to buy housing on market terms. At the same time, the number of people on housing waiting lists continues to grow.

Currently, long-term investment in the economy to develop housing finance does not exist. Foreign and private investments are on a short-term basis. There is also a shortage of long-term liquidity sources in the national currency. Credit institutions remain the main channel of stimulating financial resources for the economy. At the same time, 69 per cent of the banking sector’s funding base comes from deposits of individuals and entities, of which about 50 per cent is in foreign currency.¹ The securities market of the country also doesn’t serve as a channel of attraction of long-term debt financing while the domestic securities market needs to be developed, and there is a lack of the institutional investors in the long-term assets. Partly due to this reason, the market of mortgage-backed securities is not developing.

According to Doing Business 2017, Kazakhstan was in a good position on the ease of doing business at 35th place. On the indicator “Dealing with Construction Permits”, it ranked 22nd and is one of the top-three performers among the former Soviet countries (Estonia and Lithuania ranked 9th and 16th, respectively). However, in terms of the indicator “Getting electricity”, the country occupied the 75th place, suggesting a potential need to increase the attractiveness of the electric utility industry for domestic and foreign investors.

The housing construction sector in Kazakhstan is characterized by low competition, high administrative barriers, high risks and low transparency of lending, and dependence on direct investment of the population.

State housing programmes are mainly focused on increasing housing affordability in urban areas. The new housing programme “Nurly Zher” will shift financing of housing construction from budgetary to extra-budgetary.

The government recognizes the micro-finance industry as an important element of development. Micro-finance organizations are now under the control of the NBRK and, therefore, are required to register with them. Currently, microfinance is used mainly for lending to business activities in private farming and housing renovations for energy efficiency improvement. However, the loan amount that micro-finance organizations could provide is limited.

**Urban development**

Kazakhstan has experienced population decline after its independence, especially in the urban areas. However, since 2001, urban population has been growing. Economic growth in big cities and regional centres has been attracting people from the rural areas and small and medium-sized cities seeking better job opportunities and, therefore, better income. This has caused the population of cities like Almaty, Shymkent and Astana to grow rapidly and, in turn, the formation of urban agglomerations. In 2016, Kazakhstan’s urbanization level has reached 57 per cent although the process is still considered slow. Kazakhstan aims to achieve an urbanization level of 70 per cent and to become one of the 30 most developed countries by 2050.

Cities are drivers of economic growth in Kazakhstan, highlighting the need for more efficient and sustainable urban development policies in the urbanization process. The government should address the challenges of urbanization like housing affordability, poor utilities infrastructure and urban sprawl, among others, in line with key policy documents such as the New Urban Agenda, the 2030 Agenda for Sustainable Development and the Geneva UN Charter for Sustainable

¹ Current condition of banking industry of the Republic Kazakhstan by 01.01.2018 (NBRK)
Housing. According to an urban policy review published by the Organization for Economic Co-operation and Development, Kazakhstan needs to invest in the quality of its urbanization if it is to achieve the development objectives in its “Kazakhstan 2050” strategy.

Fostering innovation for sustainable development: Smart and Sustainable City

With global urban population forecasted to reach five billion by 2030, the need for smart and sustainable urban conglomerates has become more urgent. Making cities sustainable is a target of SDG 11 and SDG 9 calls for fostering innovation. Seeking to promote smart and sustainable cities comes with challenges. For countries with economies in transition, ECE research on innovation policies has identified barriers such as low level of entrepreneurship, insufficient access to stable sources of funding, cutting-edge technologies and knowledge, and human capital deficits. The absence of universally agreed standards and indicators that could be used to measure smart sustainability is another challenge. Together with the International Telecommunications Union (ITU), the ECE has initiated activities to help address the challenges of measuring smart sustainability through the “ECE-ITU Smart Sustainable Cities Indicators”.

As part of the smart cities agenda in Kazakhstan, the brand “Smart Astana” was advertised to represent the capital’s smart and sustainable development aspirations. This policy initiative became official with the adoption in 2013 of a road map on the need to develop an action plan for including Astana in the list of 50 smart cities of the world. The Astana Smart City initiative was inspired by the success in this area of other medium-size cities like Amsterdam, Boston and Oulu.

The development process of Smart Astana has three phases: 1) improving city management; 2) adopting new management technologies; and 3) involving the active participation of citizens.

Another important objective of the initiative is to assist Astana authorities in the introduction of innovations that could create spillovers all over Kazakhstan and contribute to economic diversification. The Astana Innovations JSC, fully owned by Astana municipality (akimat), is the key actor in the implementation of the Astana Smart City initiative and plays a significant role in coordinating all state mechanisms of innovations support. The Government Fund for the Development of Entrepreneurship or “Damu” gives support to all kinds of research and development activities on innovation, including marketing.

International cooperation, foreign direct investment and public-private partnership (PPP) play a significant and crucial role in innovative activities in Astana. In particular, authorities highlight PPPs as mechanisms to make up for possible shortfalls in public spending. In support of PPPs, the Government has enacted a law in 2015 containing new concepts and mechanisms for various PPP implementation schemes, which were based on international experiences.

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2 The “ECE-ITU Smart Sustainable Cities Indicators” was endorsed, forming the basis for the ITU-T (ITU – Telecommunication Standardization Sector) recommendations on key performance indicators (KPIs) on smart sustainable cities to address the achievement of SDG 11.
Housing sector

1. To identify a separate national public authority responsible for housing policy and housing and communal sectors development.

Issues related to the implementation of housing policy are under the Ministry for Investments and Development, which is entrusted with a wide range of other strategic issues. Given the scale, the objectives of housing construction, modernization of municipal infrastructure and existing housing stock, and improvement of management and maintenance of the multi-family housing stock, it may be recommended to identify a central government agency with the status of a Ministry to be responsible for the formulation and implementation of the government housing and utilities policies.

2. To develop an integrated policy framework for housing sector and its financing.

The Government should develop an integrated policy framework that will comprehensively define the structure and the implementation of national policies related to the housing sector, including its financing. It is further recommended to organize and synchronize all government programmes, initiatives and planned reforms, including the costs of their implementation. It is also necessary to define powers and functions of national and regional authorities in the implementation of specific housing programmes; and to increase the role of local authorities in the implementation of housing policies.

3. To improve the legislation on housing management and maintenance in order to make apartment owners and condominium management agencies responsible for the proper maintenance and operation of multi-apartment buildings, including the observance of energy-efficiency standards.

Constructing an energy-efficient building is not enough. An effective management of buildings should be put in place. It is necessary to set a schedule for energy audit, the inspection of the technical condition, thermal and power equipment, and the responsibility for the implementation of the measures to be provided after the audit of the building. During the period of building operation, an operating entity, establishes its relations with a resource supplying organization, testing the qualitative and quantitative parameters of heat-, water- and energy resources, based on an Energy Data Sheet. In compliance with the specified period, the operating entity shall monitor the actual heat and power indicators of a building, conduct an energy audit of a facility, and implement the energy-efficiency measures recommended.

4. To develop measures to stimulate the development of market based mechanisms for condominium management and maintenance.

It is necessary to develop a set of measures to improve condominium management and maintenance through market-based mechanisms as following:

a) to improve legislation regulating condominium management, to enhance the role of homeowners in community property management and to simplify the decision-making process for homeowners;
b) to provide targeted subsidies (housing assistance) to low-income homeowners in condominium objects to pay for the costs of common property maintenance, refurbishment and energy-efficiency improvements;

c) to raise awareness of homeowners in apartment buildings and encourage demand for professional services of apartment buildings management and maintenance;

d) to foster the offer of professional services of apartment houses management and maintenance on the market (to train professional housing managers, and to develop measures to support new private enterprises); and

e) to transfer to a market-based mechanism the refurbishment of condominium objects that were refused by a commissioner of refurbishment, and to provide budgetary funds to condominium object management authorities if the funds for refurbishment were preliminarily accumulated by homeowners in apartment buildings.

5. To elaborate a strategic plan to create a non-commercial rental housing sector.

The government is recommended to consider the development of an affordable (non-commercial) rental housing sector to meet the housing needs of households, which are not entitled to housing from the communal housing stock and cannot afford to purchase homeownership.

The creation of a non-commercial rental housing stock will require special measures to ensure state support to non-commercial customers and developers in order to reduce their costs for the construction of such houses and to make the rental fees affordable for the majority of citizens. These measures may include tax incentives, construction subsidies, preferential long-term loans, provision of land parcels for construction free of charge or for a subsidized fee, provision of land parcels under construction with communal infrastructure.

It is recommended to start the implementation of the programme of creation of non-commercial rental housing sector in cities with significant inflow of domestic labour migrants. Local executive authorities may be instructed to make a preliminary assessment of the need for such rental housing.

Housing construction

6. To identify the population’s needs in the development of government housing programmes.

The state housing policy envisages support to a rather narrowly defined group of population, such as, vulnerable groups, civil and military servants and employees of budgetary organizations. Groups of population with low income which however do not qualify as “vulnerable” remain outside the government housing support programmes.

Therefore, it is necessary to provide a re-assessment of the population demand for the government housing support programmes. This would help developing more targeted programmes to ensure all groups of population in real need in support are covered by the government housing support programmes.

7. To implement the measures to stimulate the development of internal long-term financing in the national currency and “de-dollarization” of the economy.

Currently, there is a shortage of long-term liquidity sources in the national currency. Credit institutions remain the main channel of attraction of finance for the economy. At the same time,
68 per cent of the banking sector’s funding base is from deposits, of which about 60 per cent is in foreign currency. In order to reduce risks, banks now prefer short-term loans with quick “turnover”.

The securities market of the country does not serve as a channel of attraction of long-term debt financing either, and the domestic securities market and institutional investors also need development. In particular, the market of mortgage-backed securities is not developed due to a lack of investors in long-term assets. The formation of a full-fledged pension system will ensure demand for mortgage-backed securities, and eventually become one of the long-term funding sources for mortgage lending. Increasing the liquidity and transparency of the securities market will form the basis for the expansion of long-term lending by credit institutions, including mortgages.

8. To ensure a stable inflow of external long-term investment in the economy to develop housing finance.

In order to increase investment attractiveness, the Government should take steps to improve the position of the country in various investment ratings and, in particular, in the “Doing Business” ranking. According to Doing Business 2017, Kazakhstan was in a good position on the ease of doing business, at 35th place. On the indicator “Dealing with Construction Permits”, it ranked 22nd, and is one of the top three performers among the former Soviet countries (Estonia and Lithuania ranked 9th and 16th, respectively). However, in terms of the indicator “Getting electricity”, the country occupied 75th place, suggesting a potential need to increase the attractiveness of the electric utility industry for domestic and foreign investors.

 Provision of long-term funding for mortgage lending in conjunction with the implementation of risk mitigation measures would contribute to a reduction in mortgage rates, which would increase the affordability of mortgages for the population.

Good performance ratings of Kazakhstan’s stock market by major international rating agencies also helps to attract foreign investors.

9. To support the established mechanisms through the introduction of new programmes that must take into account, among other things, housing security indicators and housing space standards for provision upon the completion of the Nurly Zher programme.

Successful implementation of the Nurly Zher programme will significantly advance the solution of the problem of providing the population with housing. But after it is completed, it is necessary that the developed within the programme mechanisms continue to operate.

Due to the data on necessary housing construction, taking into account the goal of achieving housing provision in 2020 of 22 m², it is necessary to increase the annual construction from the planned 10.4 million m² to about 12 million m².

Based on the number of registered people in need of housing (2.5 million people), the implementation of the programme will not completely solve the problem of providing housing as it provides for the construction of housing for 1.5 million people. It is also necessary to take into account that the number of people in need will increase during the implementation period of the programme. In addition, there is an unaccounted need for housing for those households that do not belong to socially vulnerable categories with the right to housing in the communal fund and are not investors of HCSB, as their incomes do not allow them to make savings and buy housing on mortgages.
10. To increase “transparency” in the housing construction sector.

Low competition, high administrative barriers, high risks and low transparency for lending, and dependence on direct investments of the population who actually bear all the risks, characterize the housing construction market of Kazakhstan. Foreign participants are virtually absent in this market. Increasing transparency in the housing sector would help increasing competition which, in turn, could help attracting foreign investments. This would eventually reduce the cost of construction and, therefore, increase housing affordability for the population.

11. To increase the energy efficiency of the housing stock.

The Government needs to pursue a policy that would provide incentives to improve energy efficiency of the housing stock. Currently, only MFOs provide loans to improve energy efficiency of housing, but they have limitations in terms of the loan amounts, and cannot meet all demands in this sector. Product lines of banks provide only standard loans for repairs/reconstruction, which borrowers can also use for energy-efficiency improvements. At the same time, the Government should implement international lending practices on housing energy-efficiency improvements that will benefit borrowers, such as a reduction in the payment for housing utilities.

12. To set the requirements for the energy efficiency of buildings to be constructed at the stage of the issue of construction permits (specifying the energy-efficiency class of a future building) and to check the energy-efficiency class upon its deployment stage.

The availability of the Construction Rules and Regulations on Building Energy Efficiency is, in itself, not a guarantee for the construction of energy-efficient residential buildings. The requirements for the energy efficiency of new buildings (including energy-efficiency class of a future building) should be established by relevant authorities at the stage of the issue of construction permits. In case if design documentation is changed during the construction process (this refers to the sanctioned changes), the measures should be implemented to ensure the initially established class of energy efficiency is achieved.

13. To introduce the requirements on Building Energy-Efficiency Labeling for developers and building owners.

Information on energy-efficiency class of a building should be made visible for those purchasing properties. Signs with information on energy efficiency level of residential buildings should be placed on buildings’ facades. Therefore, it is necessary to establish requirements for developers and building owners regarding building energy efficiency labeling. This will support the development of a market for energy efficient housing.

Urban development

14. To engage national partners in the design of local innovation strategies.

The municipal authorities should work with the national Government, as well as with relevant international partners, in order to support and nurture effective bottom-up initiatives for innovation. The authorities of Astana Innovations should monitor that the rolling-out of the three phases of the Astana concept is in line with national priorities and is reflected in the relevant legal frameworks.
15. To engage international partners in the measuring and monitoring of “smart” and “sustainable” innovations.

Consider joining international initiatives for the measurement of innovation at the city level, including the UNECE “United Smart Cities” project, and adopting the KPIs on SSCs, jointly elaborated by the UNECE and the ITU.

16. To enhance research and development capacities on green and other sustainable development technologies.

In line with other general UNECE recommendations to ensure the long-term sustainability of government spending on R&D, the local authorities should target R&D spending on social and eco-innovation projects. The undertaking of “Expo 2017 on the future of energy” should encourage longer term commitments. In particular, research on energy-efficient technologies should be encouraged through the competitive allocation of resources.

17. To seek engagement in global smart city networks and other international initiatives.

Taking part in initiatives by global expert networks - such as Metrolab and Cities Alliance, among others - could help enhance the knowledge-base of academia, businesses and civil society organizations, and could be an important source of knowledge transfer as well as additional financing.

18. To continue to engage with public and private international partners and organizations.

Existing cooperation initiatives between national and foreign partners on PPPs and on R&D activities could serve as pillars for further initiatives.

19. To enhance citizen participation.

As smart city initiatives increase, the need to involve urban residents in the design of policy priority will also be a necessity. The Akimat authorities should prioritize those innovations that will allow more active decision making by citizens.

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Geography

Kazakhstan is the largest landlocked country in the world. It is bordered by the Russian Federation to the north, China to the east, and Kyrgyzstan, Uzbekistan, and Turkmenistan to the south. Its territory extends almost 3,000 kilometres (km) from the Volga River and the Caspian Sea in the west to the Altai Mountains in the east, and 1,700 km from the South Ural Mountains and West Siberian Plains in the north to the Kyzylkum Desert and Tian Shan Mountains in the south.

The total area of Kazakhstan is 2,724.9 thousand square km ($km^2$), making it the world’s ninth largest country. Its size is equivalent to that of Western Europe. 99.1 per cent of the total area is land, of which 80.4 per cent is agricultural and 1.2 per cent is forest area. The terrain of the country consists mostly of deserts, steppes and hilly upland areas.

Short history

Nomadic tribes inhabited the territory of Kazakhstan until the 14th century when Genghis Khan occupied the country as a part of the Mongolian Empire. During the next centuries, the nomads returned to power. Kazakhs emerged as a distinct group by the 15th century when the Kazakh Khanate was established. The Kazakh Khanate’s territory was divided into three regions (Senior, Middle and Junior regions or “juzes”) when it was taken back from the Mongolians. To protect itself from the invasion of Jungars, the Khanate joined the Russian Empire. In 1730, the Junior Juz became part of the Russian Empire; the Senior and Middle Juz joined the Russian Empire by the middle of the 19th century.

Following the 1917 October Revolution and civil war, the territory of Kazakhstan was reorganized several times. In 1936, the Kazakh Soviet Socialist Republic was established as a part of the Union of Soviet Socialist Republics.

Kazakhstan declared its independence after the collapse of the Soviet Union on 16 December 1991. The capital of Kazakhstan was moved from Almaty to Astana (then called Akmola) on 20 October 1997.

Nature and climate

Kazakhstan’s climate is extremely continental, with hot summers and extreme winters, especially in the plains and valleys. Temperatures fluctuate widely, with great variations between regions. Average January temperatures in northern and central regions range from $-19^\circ$ to $-16^\circ$ C, and $-5^\circ$ to $-1.4^\circ$ C in the south. Average July temperatures in the north reach 20$^\circ$ C and rise to 29$^\circ$ C in the south. Annual precipitation levels are generally low, less than 100 millimetres (mm) in the deserts to between 250 mm and 350 mm in the steppes.

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Map 1. Map of the Republic of Kazakhstan

Social and economic development

According to the World Bank income classification, Kazakhstan has transitioned from lower middle income to upper middle income status in 2006. Its GDP in 2015 was USD 184.4 billion, ranking 50th in the world\(^6\). In the same year, GDP per capita was USD 25,045.

Figure 1

As a part of the Soviet Union’s centrally planned economy, Kazakhstan specialized in the production of wheat, metallurgy and mineral extraction. After the collapse of the Soviet Union and following its economic disintegration, the country faced a sharp decline in production, growth of inflation and a budget imbalance. The economy declined drastically, and the country lost 36 per cent of its GDP in the first half of the 1990s.

The economy started recovering in the second half of the 1990s, triggered by high international oil prices and good harvests, before being hit by the 1998 Russian financial crisis. Starting from 2000, it grew again, underpinned by export growth and currency devaluation. There has been a sharp expansion in commodities revenue, in particular from oil export. GDP growth figures were between 8.9 per cent and 13.5 per cent from 2000 to 2007. Foreign investments have also bolstered Kazakhstan’s export volume growth through investment in the oil sector’s technologies and production capacities.

From 2011, the country has experienced another slowdown in economic growth due to lower global commodity prices and the economic downturn of its Eurasian Economic Union partner, Russia. Kazakhstan devalued its currency, the tenge, by 19 per cent in February 2014 in response to a round of regional currency devaluations and a worsening balance of payments due to rising imports. In November 2014, the Government announced a package of incentives to counter economic challenges.

In 2015, Kazakhstan undertook wide-ranging reforms in an attempt to modernize its economy and improve its institutions. Thanks to these measures, Kazakhstan experienced economic growth and an increase of GDP per capita: the percentage of the population living below the national poverty line declined from 46.7 per cent in 2001 to 2.7 per cent in 2015 (Figure 3). However, the gap between urban and rural poverty is still high: the urban poverty rate is 1.3 per cent while the rural rate is 4.4 per cent.
In spite of progress in institutional reforms and legislation in the 2000s, bureaucracy and arbitrary law enforcement, especially at the regional and municipal levels, are still seen as the main concerns by potential investors\(^7\). Kazakhstan is the second largest post-Soviet oil producer, and its economy remains heavily dependent on oil and extractive industries, which makes it vulnerable to changes in oil and commodities prices.

**Population, demography, and urbanization patterns**

According to the State Committee on Statistics of Kazakhstan, the population of the country was 17.92 million\(^8\) as at 2017. Given Kazakhstan’s large land area, its population density is among the lowest, at 6.6 persons per km\(^2\)\(^9\).

The population increased by 8 per cent in the last 25 years; it was 16.4 million people in 1991\(^10\). However, Kazakhstan’s external migration balance has only become positive since 2004 for several reasons. The country faced massive emigration between 1991 and 2004, following its independence. The population loss amounted to 1.49 million people\(^11\). The main reason behind it was the freedom of movement introduced after the collapse of the Soviet Union which allowed people who initially moved to Kazakhstan from Russia and other former Soviet republics to return to their homelands or to find better economic prospects. However, since 2004, the country experienced immigration: the population has been on the rise due to the influx of ethnic Kazakhs and a growing number of labour immigrants from neighbouring Central Asian countries. There is also a trend of migration of the rural population to urban areas. The population flows are directed mostly from rural to urban areas and from small and medium sized cities to urban centres. The two big cities, Almaty and Astana, continue to attract most of the internal migrants. While the total population of Kazakhstan grew from 2006 to 2016 by 16.1 per cent, the population in urban areas increased by 15.8 per cent, while that in rural areas increased by 16.6 per cent (Figure 4). Today, the urban population comprises 57 per cent of the total population, while the rural population makes up 43 per cent.

The average population density of Kazakhstan is low; in 2016, it was 6.6 persons per km\(^2\). The most densely populated region is the South Kazakhstan Region (24.5 persons/km\(^2\)). Given that Almaty and Astana have approximately equal urban areas (700 km\(^2\)), the population density of Almaty, at 2,501.9 persons/km\(^2\), is 1.8 as high as that of the capital city (1,389.6 persons/km\(^2\))\(^12\). This is explained first of all by the physical geography of Almaty; it is surrounded by mountains and is therefore limited in the possibility of expanding its territory.

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\(^11\) Ibid.

Thanks to robust economic growth, the unemployment rate has been steadily decreasing, from 7.5 per cent in 1994 to 4.9 percent in 2016. Unlike other Central Asian states, Kazakhstan does not have any significant dependence on personal remittances from other countries. Even though the amount of personal remittances transferred to Kazakhstan in 2015 (USD 194.5 million) has almost doubled from its 1995 level (USD 116.1 million), its share in the country’s GDP, of 0.1 per cent, is the lowest in the region.

Figure 4
Change in resident population, 2006-2017


In 2017, there were 87 cities in Kazakhstan, including 2 of significance (Astana and Almaty) and 38 of regional subordination. There were 30 settlements and 6,683 rural human settlements (auyls). More than half of rural human settlements are small, with only 8.9 per cent of the rural population living in these settlements.

The largest city of Kazakhstan, Almaty, had a population of 1.7 million in 2017, while the capital, Astana, had 0.97 million.

According to the 2020 Programme of Regional Development, the Government plans regional development through support to the development of urban agglomerations within the central cities of Astana, Almaty, Shymkent, and Aktobe, and, in the longer term, within Ust-Kamenogorsk. The emerging urban agglomerations are home to a third of the population.

Government and administrative divisions

16 2020 Program of Regional Development approved by the Government Decree No. 728 of 28 June 2014.
According to the Constitution, adopted in 1995, the Republic of Kazakhstan is a unitary state with a presidential form of government and a bicameral legislature. The executive branch is represented by the President serving as the head of the State and the Prime Minister leading the Government. The legislative branch of the Government consists of a Senate and an Assembly (Mazhilis). Working jointly, the two chambers have the authority to amend the Constitution, approve the budget, confirm presidential appointees, ratify treaties, declare war, and delegate legislative authority to the President for up to one year. Each chamber also has exclusive powers. The President is elected by a simple majority popular vote for a five-year term (eligible for a second term). The Prime Minister and Deputy Prime Minister are appointed by the President, with the approval of the Mazhilis.

Kazakhstan consists of 14 oblasts (regions) and 2 municipal districts (Almaty and Astana), which are administratively independent cities with a status comparable to an oblast. Each oblast is headed by an akim (governor), appointed by the President. Municipal akims (mayors) are appointed by oblast akims. Since December 1997, the capital of Kazakhstan has been Astana. From 1929 to 1997 the capital Almaty, founded in 1854.

The judicial system has three tiers: the local courts, the regional (oblast) courts and a national 44-member Supreme Court. In addition to these, the judicial system includes the seven-member Constitutional Council, specialized courts.
PART I
HOUSING SECTOR

Chapter 1. Legislative and Institutional Framework of the Housing Sector

A. LEGISLATION

Law No. 94-I of 16 April 1997 on Housing Relations is the main regulatory instrument in the field of housing in Kazakhstan. It regulates matters related to the:

- conditions for the creation and termination of property rights to housing and the exercise of the right to use the homes;
- requirements regarding housing conditions;
- preservation and maintenance of the housing stock;
- establishment and termination of condominiums as a form of immovable property ownership;
- establishment of condominium management methods, as well as those related to the establishment and activities of cooperatives of homeowners (apartments owners) and housing cooperatives (established for the construction of cooperative housing);
- powers of state housing agencies, including control over the observance of citizens’ housing rights and use; and
- regulatory aspects of housing, with the participation of “employees of special government agencies” (includes the provision of housing subsidies to some categories of government officials, such as those in military service and similar).

The Civil Code (1994)\textsuperscript{17} sets out the basis for property rights, including:

- the right to an apartment in a housing co-operative whose members fully pay their share contribution (Article 235);
- the right to a newly created immovable asset (Article 236); and
- the right to own an unauthorized residential construction (house) (Article 244).

The Civil Code also provides the rules regarding the termination of property rights to immovable property, resulting from a decision of a government body to reserve the land upon which a house or any other property of the owner is located (Article 255), and other issues relevant to the housing sector.

The Land Code (2003)\textsuperscript{18} regulates matters pertaining to land. It defines:

- property rights, land management rights and other land rights;
- land categories; and
- the procedure for land development, state land cadastre maintenance and land monitoring.

\textsuperscript{17} Enforced by Decree of the Supreme Council of the Republic of Kazakhstan No. 269-XII of 27 December 1994.

The Land Code stipulates that land in Kazakhstan is a public domain. Private ownership is possible based on the terms, conditions and limits established by Article 3 of the Land Code. Private ownership of land granted to citizens and non-State entities includes land parcels for the construction of individual housing, and for the construction of residential buildings and their complexes, including land intended for the maintenance of buildings (Article 23). The Land Code determines the procedures for the provision of land parcel for construction, including for individual housing construction and construction within urban areas.

Law No. 242 of 16 July 2001 “On Architectural, Urban planning and Construction Activity” has jurisdiction over matters arising between state bodies, individuals and legal entities in the process of the implementation of architectural, town-planning and construction activities in the Republic of Kazakhstan. It is directed at creating a proper human environment, and the sustainable development of inhabited localities and inter-settlement territories. The Law sets out safety requirements for, and outlines the process of control and supervision of, architectural, urban planning and construction activities; and establishes a government system of architectural, urban planning and construction normative documents.

Law No. 541-IV of 13 January 2012 “On Energy Saving and Energy Efficiency” governs the area of energy saving and energy efficiency. It defines the legal, economic and organizational frameworks of energy-saving and energy-efficiency activities for individuals and legal entities, as well as the competence of state bodies in this field. The Law stipulates that buildings under design or construction, as well as reconstruction or refurbishment, should comply with the energy-saving and energy-efficiency requirements of the legislation, including:

- listings containing the description of the specific value of loss of energy resources in buildings and construction;
- requirements regarding architectural and space planning, and technological, constructional and engineering solutions for buildings;
- requirements regarding engineering systems and technological equipment used in buildings; and
- requirements regarding technologies and materials that enable the exclusion of irrational (unreasonable) losses of energy resources used in construction (reconstruction, refurbishment) of buildings (Article 11).

In line with the objective to develop construction objects, the Law requires a constructed object that is put into operation to state its energy-efficiency class in the technical certificate of the constructed (reconstructed, repaired) object. The energy-efficiency class of existing buildings is determined by an energy audit. Article 17 of the Law envisages the possibility of providing government support to the owners of residential houses (residential buildings) and individual homes (apartments) to pay for the activities promoting energy saving and improving energy efficiency in housing to ensure the housing conditions are in line with requirements of the Law on Housing Relations.

Law No. 310 of 26 July 2007 “On State Registration of Rights to Immovable Property” determines the purposes, tasks and legal basis of state registration of rights to immovable property. This Law defines:

- a list of immovable property rights, which are subject to state registration in the legal cadastre (Unified State Register of registered rights to immovable property) (Article 4);
- the encumbrance of immovable property rights (Article 5);
- the state registration of an object of condominium (Article 39);
• the rights to apartments and other premises included in the object of condominium (Article 40); and
• the necessary condition for the state registration of rights to immovable property, which is the State technical inspection of buildings, along with the assignment of cadastral numbers, and the preparation of technical certificates (Article 18).

B. INSTITUTIONAL FRAMEWORK OF THE HOUSING SECTOR

The Government develops the main areas of the state housing policies and ensures their implementation. It establishes the rules of housing assistance provision and the procedures of public housing stock privatization; and develops the procedures of registration of citizens who need housing, with a view to obtaining housing from the public housing stock or from regional and district authorities (akimats) who rent private housing and provide it to citizens in need of housing.

At the national government level, until May 2017, responsibility for the management of the housing sector was with the Ministry of National Economy of the Republic of Kazakhstan (the MoNE), and specifically with its Committee on Construction, Housing and Communal Services (the CCHCS). Then these powers were transferred to the Ministry for Investments and Development of the Republic of Kazakhstan.

The Ministry for Investments and Development is the state executive body which manages the formation and implementation of state policy in the field of architecture, town planning, construction, housing relations, water supply, water disposal, municipal services and management of municipal waste (except for solid domestic waste)¹⁹, state regulation in the field of water supply and sanitation, heat supply (except for heat, and boiler conducting which provides heat in district heating zones) in settlements, as well as in the field of energy conservation and efficiency. As the authorized body in the field of housing relations, the Ministry coordinates and guides the local executive bodies in the sphere of housing relations. Within its competence, it:

- develops and approves normative legal acts, and normative and technical documentation;
- determines a unified procedure for the implementation of state accounting of the housing stock, approves the technical requirements for housing, and monitors the condition of the housing stock;
- develops and approves a methodology for the distribution of dwellings from the public housing stock or dwellings leased by the local executive body from private housing stock, and the methodology for calculating the amount of payment for the use of housing from the public housing stock; and
- develops rules for, and monitors, the provision of housing assistance.

With regard to the management of condominiums, the Ministry approves the rules for maintaining the common property of condominiums, and develops and approves the methodology for calculating the cost estimates for the maintenance of the common property of condominiums, and the standard provision on housing inspection.

The MoNE is the state executive body which manages the areas of strategic planning, tax and budget policy, as well as regional development, local government development, development and support of private entrepreneurship, self-regulation, competition protection and monopolistic activities in the relevant commodity markets, regulation and control in the spheres of natural

¹⁹ Until 2017 this was done by the Ministry of National Economy of the Republic of Kazakhstan.
monopolies, except in the field of telecommunications and universal postal services, state statistical activities and consumer protection, including in the field of activities of natural monopoly entities.

The Committee for Construction and Housing and Communal Services of the Ministry for Investments and Development is an agency which, within its competence controls and realizes functions in the field of architectural, town planning and construction activities, housing relations and communal services, and management of municipal waste (with the exception of solid waste). The Committee carries out state regulation of water supply and drainage, and heat (other than thermal power plants and boiler plants carrying thermal energy to district heating zones) within the boundaries of settlements.

The Committee for Regulation of Natural Monopolies, Protection of Competition and Consumer Rights of the MoNE is a state body that monitors and regulates the activities of natural monopoly entities, including the approval of tariffs for utilities, and the approval, in cooperation with the relevant state body, of investment programmes (projects) regarding natural monopolies that are taken into account when approving tariffs for regulated ceilings.

The Ministry of Labor and Social Protection of Population is the authorized state body for the implementation of state policy in the fields of labour and social security, social protection, provision of social assistance (subsidies for payment of housing and communal services) to certain categories of citizens, including housing assistance to low-income families, and computer services. It:

• approves the procedure for calculating the aggregate income of a person (family) applying for targeted social assistance, and approves (jointly with the authorized body in the field of state statistics) the procedure for calculating the minimum amount of the subsistence;

• establishes the procedures for the calculation of the subsistence level (in cooperation with a competent authority in the field of government statistics);

• determines the poverty threshold;

• develops a social protection action plan;

• makes statistical observations in the sphere of social protection of the population; and

• develops and approves regulations on information systems maintenance, and organizes access to these information systems and databases in the sphere of social security of citizens.

Legislative branches of the regional and district authorities (maslikhats) have the responsibility for approving regional/district development plans, respective economic and social development programmes, local budgets and their execution reviews, social assistance rules (including housing assistance), and establishing and identifying a list of individual categories of citizens in need. Further, they approve rules concerning: preparation for the heating season; handling and the protection of green space; and landscaping for cities and settlements developed on the basis of standards approved by an authorized architecture, urban planning and construction agency.

The powers of the maslikhats of regions, cities of significance, and the capital also include:

• submission of approval for schemes regarding district planning of a region;

• approval of master plans for the development of regional centres, cities of significance and the capital city;

• adoption of district plans of administrative areas and cities of and district significance;
• The powers of local maslikhats (of smaller cities and villages) include approving master plans for the development of cities, towns and villages.

Executive branches (akimats) of regions, cities of republican significance, the capital, districts, and cities of regional significance have responsibility for providing land parcels for private ownership and for land use, including for housing. They keep a record of citizens in need of housing, and transfer ownership of housing from the municipal housing stock to the citizens of the country under the conditions envisaged by law and according to the procedures determined by the Government. The local executive bodies ensure government control of housing stock management; organize housing inspections to control the activities of condominium management authorities related to the maintenance and proper use of the housing stock; and provide housing assistance to low-income citizens from budgetary funds.

In addition to the ministries and national, regional and local authorities, a number of state enterprises are involved in the management of the housing sector in Kazakhstan.

The JSC “Kazakhstan Centre for Modernization and Development of Housing and Communal Services” was established by a decision of the Government in 2009, with 100 per cent State participation in its authorized capital. The sole shareholder of this JSC is the Committee on Housing and Communal Services. Its main activity is to contribute to the dynamic development of housing and communal services by improving the institutional framework of the industry. It is part of the government innovative development institutions of Kazakhstan. The main activities of the Centre are as follows:

• to increase the investment attractiveness of housing and communal services in order to modernize and develop them;
• to conduct analytical and scientific research, and introduce innovative technologies in the sphere of housing and communal services;
• to identify an optimal model of modernization and development of housing and communal services;
• to implement measures ensuring vocational training in housing and communal services; and
• to introduce modern methods of management of housing and communal services.

The non-profit JSC State Corporation “Government for Citizens” has 100 per cent government participation in its authorized capital, and provides public services to citizens and legal entities, including public e-services, in accordance with legislation. It applies the single-window principle in accepting and processing applications for services. Government for Citizens was established by merging and transforming the following:

1. Republican State Enterprise (RSE) “Citizen Service Centre” of the Liaison Committee on Informatization and Information of the Ministry for Investments and Development;
2. RSE “Real Estate Centre” of the Ministry of Justice;
3. RSE “Scientific and Production Centre of Land Cadastre” of the Construction, Housing and Communal Services and Land Management Committee of the MoNE; and
4. Republican State-Owned Public Enterprise “State Centre for Pension Payments” of the Ministry of Healthcare and Social Development.

Government for Citizens makes technical inspections of buildings, constructions and/or their components, maintains the public land cadastre, and registers pledges of movable property that is not subject to mandatory public registration.

**JSC “Baiterek National Management Holding”** (Baiterek Holding) was established in 2013 in accordance with the Decree of the President of the Republic of Kazakhstan No. 571 of 22 May 2013 “On Some Measures to Optimize the Management System of Development Institutions, Financial Organizations, and Development of the National Economy”. The Government is its sole shareholder. The main objective of Baiterek Holding is to manage the participation shares (owned and in trust) of national development institutions, national companies and other legal entities. Its structure includes 11 organizations, including financial institutions and national companies engaged in projects related to immovable property, housing and construction savings, and in the implementation of the government programme “Regional Development Programme 2020” – the JSC “Housing Construction Savings Bank of Kazakhstan”, JSC “Mortgage Organization “Kazakhstan Mortgage Company”, JSC “Baiterek Development”, and JSC “Housing Construction Guarantee Fund”. Baiterek Holding is an operator that finances housing construction for citizens who are on the housing waiting lists of LEAs and depositors in the Housing Construction Savings Bank.

The JSC “Housing Construction Savings Bank of Kazakhstan” is the only bank in Kazakhstan that implements the system of housing construction savings. The system is intended to improve the housing conditions of people by attracting depositors’ money to housing construction deposits and providing depositors with housing loans.

The JSC “MO” Kazakhstan Mortgage Company” (JSC “MO” KMC) was established pursuant to the Concept of Long-term Housing Construction Finance and Development of Mortgage Lending in the Republic of Kazakhstan approved by the Government of the Republic of Kazakhstan, № 1290 dated 21 August 2000.

The activities of the JSC “MO” KMC are guided by the main areas of the government policies aimed at increasing housing provision. Pursuant to the Nurly Zher government programme and Development Strategy, the JSC “MO” KMC was appointed as a financial agent/operator for the implementation of activities aimed at improving affordability of mortgage lending through a subsidy tool for partial reimbursement of interest rates on housing mortgage loans provided by second-tier banks, and funding of STBs and financial organizations carrying out some types of banking operations through the acquisition of claiming rights on mortgage loans and mortgage-backed securities of financial organizations. Moreover, the main activities of the JSC “MO” KMC include the provision of rental housing within the framework of previously adopted government programmes.

The JSC “Baiterek Development” (Baiterek Development) is an investment company with Baiterek Holding as the sole shareholder. Baiterek Development implements investment projects in the non-primary sector of the economy. It carries out the return of funds allocated for anti-crisis measures, completes the financing of problematic objects of construction in shared construction projects and finances construction housing through the buybacks of the local executive authorities’ (LEA) bonds. Baiterek Development takes part in the implementation of the Nurly Zher State Programme for 2015–2019, which ensures housing infrastructure development, and the Regional Development Programme 2020, which ensures the construction of rental and loan housing.

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21 Measures to implement this Decree are in Regulation of the Government of the Republic of Kazakhstan No. 516 of 25 May 2013.
The Housing Construction Guarantee Fund was created at the end of 2016 by the JSC “Kazakhstan Mortgage Loans Guarantee Fund”, which was established in 2003 to increase the availability of mortgage loans to citizens. The established system of mortgage loan guarantees made loans available to citizens, especially to young families who could not afford the high initial payment, as well as to those with low but steady incomes. In 2013, the provision of guarantees for mortgage loans was suspended and, currently, only previously issued guarantees are serviced. Starting from 2016, the main activity of the Fund is to guarantee the completion of a residential housing construction should the construction company fail to fulfil its obligations to the shareholders.

State “Housing Inspection” institutions are non-commercial legal entities established by the LEAs of a city of significance, the capital, a district, or a city of regional significance if there are condominium objects in their respective administrative areas. Housing inspection authorities exercise the functions of state control in the sphere of housing management – they control the technical condition of the common property in condominium objects, and its timely maintenance and repair, implement measures for the preparation of residential houses (residential buildings) for seasonal operation, and control the availability of communal heat, electricity, gas and water meters. The housing inspection authority has the power to determine a list, periods and priority of certain types of refurbishment of the common property of a condominium object, and to approve cost estimates for certain types of refurbishment of the common property of a condominium object submitted by the condominium management authority, if such refurbishment is partly financed from the housing assistance provided from the local budget. The housing inspection authority takes part in the preparation of normative and methodical documents for the quality control of the maintenance of residential houses (residential buildings) and adjacent areas, and the provision of public services. It also provides advice to citizens and organizations on the management and maintenance of residential houses (residential buildings) and adjacent areas.

22 The standard provisions of housing inspection authorities were approved by the Order of the Minister of National Economy of the Republic of Kazakhstan No. 241 of 20 March 2015.
Chapter 2. Housing Policies and Programmes

The Constitution of the Republic of Kazakhstan (1995) stipulates that the country shall create the conditions required to provide housing to its citizens. Various strategic documents declare the provision of housing as the purpose of public housing policies. Housing provision is a national objective and is a priority area of the Forecast Scheme for Spatial-Territorial Development of the Republic of Kazakhstan until 2020.

Kazakhstan’s public housing policies are implemented through government housing programmes. Since 2005, Kazakhstan has adopted six government housing construction programmes, the most recent of which is the Nurly Zher Housing Construction Programme (Nurly Zher).

Housing policies in government programmes have changing priorities. For example, the priority of the state programme for 2005-2007 was to promote housing construction by private developers and increase the availability of mortgage loans for homebuyers. Results of an assessment of the purchasing power of the population in 2011 showed that over 6 million working citizens out of the 8.4 million who are economically active could not afford to buy housing on market terms. Based on this assessment, a new housing policy priority emerged, that is, to increase the affordability of housing for citizens with average and lower than average incomes. This is to be accomplished through the construction of rental housing and housing for the participants of the housing construction savings system, out of the funds allocated from the republican budget to LEAs, and funds of development institutions established by the Government. The priority of the most recent housing programme, Nurly Zher, is the transition from direct budgetary financing of housing construction to extrabudgetary financing.

State housing programmes that were established to increase housing construction and ensure housing affordability for various categories of citizens with different incomes, use different mechanisms to address their goals:

- to attract private investment in housing construction through the provision of affordable bank loans to private developers, and through the use of public-private partnership tools;
- to ensure citizens’ access to loans for the purchase of housing by mitigating mortgage lending conditions (by reducing the amount of the initial payment and loan interest rates, and by increasing the loan period), and to provide subsidized housing loans to participants of the housing construction savings system;
- to support individual housing construction by providing land parcels for individual construction, equipped with municipal infrastructure, out of the republican and local budgets, and by developing and providing free standard plans for the construction of individual houses;
- to engage development institutions and private developers in the construction of affordable housing provided to citizens on rent-to-own terms;
- to support the construction of municipal housing stock by LEAs in order to provide housing to socially vulnerable groups of citizens by ensuring targeted transfers from the national budget, budget loans, and the issue of securities by LEAs and their redemption by government-established development institutions; and

24 Approved by Presidential Decree No. 118 of 21 July 2011.
• to reduce the cost of construction by 1) providing land parcels for construction, 2) speeding up and simplifying procedures related to obtaining construction permits, 3) providing land parcels for construction, equipped with engineering and municipal infrastructure, and 4) developing industrial housing construction and manufacturing home-produced building materials and equipment.

The Government has created a wide range of opportunities for citizens to gain access to housing ownership.

The presence of the Government in the housing sector is significant (please see more in Chapter 1 on the institutional framework of the housing sector). The State allocates a significant amount of its national budget to satisfying the housing needs of its citizens.

It should be noted that the Government takes extraordinary measures to protect the interests of its citizens during crises. During the financial crisis of 2008-2009 (the global financial crisis), which bankrupted many private developers, the Government provided KZT 464.3 billion from the public budget and the National Fund of the Republic of Kazakhstan to complete the construction of 450 residential complexes in order to protect the rights of the 62,889 co-investors.

Experience in the implementation of government housing programmes serves as the basis for permanent changes in the legislative and regulatory sectors.

ANALYSIS OF GOVERNMENT HOUSING PROGRAMMES

Since 2005, the Republic of Kazakhstan has adopted seven government programmes targeted at housing construction and the increase of housing provision:

• the Government Programme of Housing Construction Development in the Republic of Kazakhstan in 2005-2007;
• the Government Programme of Housing Construction in the Republic of Kazakhstan in 2008-2010;
• the Programme of Housing Construction in the Republic of Kazakhstan in 2011-2014;
• the “Affordable Housing – 2020” Programme (the Programme was cancelled in 2014 due to the fact that its objectives were included in the new integrated programme – the 2020 Programme of Regional Development);
• the 2020 Programme of Regional Development (the Programme was adopted in 2014 and, until the end of 2016, it included the objective of “Housing Construction Development”; its priority was government support for affordable housing construction);
• the Nurly Zher Housing Construction Programme (approved on 31 December 2016).

Housing was constructed under the Nurly Zhol Government Programme of Infrastructure Development for 2015-2019, which envisaged the allocation of funds from the National Fund of the Republic of Kazakhstan to finance the construction of rental, loan and commercial housing.

Various mechanisms for supporting housing construction and ensuring housing provision for different categories of the population were tested and then developed within the context of government programmes.

Government programmes are implemented by LEAs and organizations with the participation of the Government.
The Nurly Zher Housing Construction Programme

Nurly Zher was approved by Resolution of the Government of the Republic of Kazakhstan No. 922, dated 31 December 2016. Its purpose is to increase housing affordability for the population. It will span a period between 2017 and 2021.

It combined objectives related to housing construction, and funds allocated for these purposes earlier under the 2020 Programme of Regional Development and the Nurly Zhol Government Programme of Infrastructure Development in 2015-2019.

When implementing Nurly Zher, it is planned to shift the emphasis from direct budget financing of housing construction to extra-budgetary financing.

It is planned to introduce 52.79 million m² of housing through all sources of financing over the five years of the implementation of the Programme, including 25.92 million m² of multi-apartment housing, and 26.87 million m² of individual housing. The accomplishment of the planned indicators will result in the increase in the area of the housing stock by more than 15 per cent, compared to the beginning of 2016. Within the framework of the Program, it is planned to improve the living conditions of 1.5 million citizens.

The Programme is planning to address the following seven objectives:

Objective 1: To increase the affordability of mortgage lending. Since, between 2013 and 2016, the mortgage market experienced a decline in activity due to high interest rates (15 to 21 per cent per annum), limited availability of mortgage loans, as well as strict requirements of the banks for the borrowers resulting from changes in legislation, the Programme plans to restore the volume of mortgage lending in commercial banks to annual levels of loans of KZT 150 billion. To this end, it is planned to subsidize the remuneration rate for mortgages provided by banks to the population so that, after subsidizing, the rate becomes 10 per cent per annum for the end borrower. Subsidies are provided only for mortgage housing loans provided by the second-tier banks at the interest rate that does not exceed 16 per cent annually.

The funds to subsidize the interest rate of mortgage loans must be allocated annually from the national budget from 2017 onwards. The subsidy to banks will be provided through the financial agent – KMC.

The mandatory requirements for the participation of a borrower (an individual) in the Programme are as follows: mortgage housing loans are provided for the purchase of housing in the primary market; the term of the loan is up to 180 months; availability of funds equal to no less than 30 per cent of the value of the acquired housing at the borrower’s account, and/or documents confirming payment to a seller, and/or an equivalent additional security for residential property owned by a borrower or a third party. The maximum amount of the mortgage housing loan to be subsidized is KZT 20 million in the cities of Astana and Almaty, and KZT 15 million in other regions. The maximum term of subsidizing is 120 months, and is no longer than the term of the loan.

Objective 2: To encourage the construction of housing by private developers. To stimulate the supply of affordable housing by private developers, the Programme plans to provide developers with financial resources through expanding the scope of loan provision by commercial banks. To this end, it is proposed to subsidize the interest rate for loans that banks provide to private developers. Subsidies are provided only for the loans provided by banks at a rate of remuneration that does not exceed the level of the base rate of the National Bank of the Republic of Kazakhstan (as in effect when the decision to provide the subsidy is made) by more than 5 per cent.
The funds to subsidize the interest rate of the developers’ loans will be allocated annually from the republican budget from 2017 onwards. The subsidy will be provided through a financial agent, JSC “Damu Enterprise Development Fund”.

The mandatory requirements for the participation of a borrower (private developer) in the Programme are as follows: the term of loans is up to 36 months; the purpose of the loan is housing construction; the private developer is obliged to offer at least 50 per cent of the constructed housing to the investors of the Housing Construction Savings Bank (HCSB) at fixed prices for 1 square metre (up to KZT 260,000 in the cities of Astana and Almaty and their suburban areas, and up to KZT 220,000 in other regions). The maximum subsidization period is 36 months.

**Objective 3: To construct affordable housing for the members of the housing construction savings system (including citizens on the housing waiting list of LEAs).** To address this objective, there are several mechanisms for raising funds to finance housing construction to be acquired by depositors of the HCSB (the Programme defines this type of housing as “loan housing”):

1. Local executive bodies shall issue securities (bonds) with a maturity period of up to 2 years with coupon payments of 0.15 per cent annual interest twice a year;

2. Baiterek National Managing Holding and the Samruk-Kazyna Immovable Property Fund shall provide preferential loans to private developers by placing conditioned contributions (deposits) in banks for a period of up to 5 years; and

3. Baiterek National Managing Holding shall raise funds from international financial organizations against corporate guarantees to finance the construction of energy-efficient housing with the use of new technologies.

The first mechanism – housing construction financed by the LEAs at the expense of bonded loans – is proposed as the main mechanism by the Programme. The Government is entitled to allocate loans to LEAs from the republican budget at the rate of 0.01 per cent per annum for the implementation of housing projects for members of the housing construction savings system. The allocated funds are meant to be reused in new construction projects. The funds of Baiterek National Managing Holding and the Samruk-Kazyna National Welfare Fund will be used for the redemption of securities of LEAs.

LEAs direct funds from the bonded loan to the construction of housing, with a limited floor area of homes (a maximum of 80 m$^2$ with a permissible variation of not more than 5 per cent), and with a limited cost of selling housing to depositors of HCSB (up to KZT 180,000/m$^2$ in the cities of Astana, Almaty, Atyrau, and Aktau, and up to KZT 140,000/m$^2$ in other regions).

When selecting the housing construction projects presented for consideration, priority is given to industrial house-building projects. To this end, and in order to increase the volume of housing put into operation under the Programme, there are plans to develop model projects of compact housing with the use of industrialized housing construction technologies.

To ensure the predetermined cost of housing and to increase the volume of construction, LEAs are entitled to use a public-private partnership mechanism. Under such projects, developers construct residential buildings with built-in non-residential commercial premises, social facilities and/or additional floors, and have the right to sell the apartments at market price.

Developers are engaged by LEAs through a competitive tender according to the public procurement regulations. Private developers are required to have a land parcel with rights of ownership and land use, dedicated to housing construction, free from encumbrances, with engineering and municipal infrastructure, or a land parcel where there are plans to ensure
engineers and municipal infrastructures according to the master plan and human settlement development plan. Developers are also required to have construction design specifications and estimates with a positive conclusion of the comprehensive extra-departmental expert review. Developers are required to give consent to the provision of security as a pledge of the land parcel, unfinished construction, and design specifications and estimates.

At least 50 per cent of the housing constructed at the expense of LEAs is provided to citizens who are both on the housing waiting list of LEAs and depositors of the HCSB. The remaining housing is provided to depositors in the HCSB. Housing is provided to citizens by right of ownership through the use of housing loans, accumulated housing construction savings and/or own resources. The HCSB can provide its clients with preliminary and intermediate housing loans at reduced interest rates.

To ensure the turnover of funds allocated for the construction of loan housing, there are plans to annually allocate KZT 24 billion to the HCSB for 5 years from 2017 onwards.

Objective 4: To establish a rental housing stock for the socially vulnerable population stratum. To provide housing to the citizens on the housing waiting list of LEAs, and to the socially vulnerable population stratum, the Programme envisages targeted transfers to regional budgets, and to the budgets of the cities of Astana and Almaty. The local authorities should spend these funds on the construction of housing with limited floor space of apartments, and with a limited cost of up to KZT 180,000/m$^2$ in the cities of Astana, Almaty, Atyrau, and Aktau, and up to KZT 140,000/m$^2$ in other regions (excluding the cost of providing the area under construction with utilities).

The constructed housing is classified as municipal housing stock, and is provided to citizens belonging to the socially vulnerable categories of the population, on lease and without the right of redemption.

To solve this task, in 2017, KZT 25 billion was allocated for the construction of 2,697 apartments, with a total area of 150,000 m$^2$.

To ensure the established housing cost limitations, local executive bodies shall be entitled to build rental housing using the mechanisms of public-private partnerships (see Objective 3).

Objective 5: To develop individual housing construction. Within this objective, it is planned to continue financing the development of the engineering and municipal infrastructures for individual construction. To this end, funds will be allocated annually from the republican budget to ensure that around 40,000 land parcels are provided with water and electricity networks. Provision of utility systems for heat and gas supply, sewerage (waste water management), telephones, and road and driveway construction works in the neighbourhood should be financed from the local budget.

Sites for individual housing construction should be allocated as residential districts in accordance with the approved master plans and local area development plans. Also, LEAs should distribute model construction plans of low-rise residential buildings free of charge.

The priority of this objective is the construction of individual houses in a universal architectural style.

It is planned to implement a pilot project of this type of construction in regional centres through a single developer, with the subsequent sale of individual houses to citizens on a waiting list for a land parcel for individual housing construction. Technologies of integrated home-building factories as well as local building materials will be used for the construction of individual houses.
To finance the construction of individual houses through a single developer, LEAs are entitled to use funds raised through the issuance of debt securities (see Objective 3). A single developer is entitled to use a subsidized loan (see Objective 2).

The cost of an individual house in a pilot project should not exceed KZT 120,000 (excluding the cost of the engineering and communal infrastructures). When selling a constructed house, the total price includes the cost of engineering and utilities infrastructures.

Citizens on a waiting list for land parcels and participating in the pilot project have the right to independently purchase a finished house with a land parcel and communal infrastructure or to obtain a loan from the HCSB for its purchase. To this end, loans from the HCSB will be provided at reduced interest rates (up to 5 per cent per annum) funded by government subsidies. The land plot on which the individual house is located is provided to the participants of the pilot project for long-term temporary non-gratuitous land use until the purchased house is fully paid for, and then ownership is transferred.

In 2017, six standard projects for the construction of individual houses, with an estimated cost of houses of KZT 99,000 to KZT 115,000 per m² were developed. In 2017-2018, in the framework of pilot projects, it is planned to build up 1,975 plots of individual dwelling houses, with a total area of 219,000 m², in the Aktyubinsk, North Kazakhstan, Zhambyl, Kostanay, Almaty and South Kazakhstan oblasts.

**Objective 6: To provide citizens with rental and commercial housing.** Under this objective, the housing construction areas mentioned above, envisaged in the Nurly Zhol Government Programme and the 2020 Programme of Regional Development, will be completed between 2017 and 2019:

1) the construction of rental housing by LEAs for citizens registered with LEAs and young families, using funds provided from the republican budget, will be completed in 2017–2019;

2) the construction and acquisition of rental housing by the Kazakhstan Mortgage Company will be completed using funds previously allocated from the National Fund of the Republic of Kazakhstan, followed by the provision of housing for rent with a right of redemption to citizens on the waiting list of LEAs and belonging to socially vulnerable categories of the population (the redemption period is up to 20 years);

3) in 2017, JSC “Baiterek Development”, was to complete the construction of rental and loan housing started under the Nuryl Zhol Programme. Housing is provided to citizens registered with LEAs for rent with the right of redemption (the period of redemption is up to 20 years), as well as for ownership to the depositors of the HCSB; and

4) the Samruk-Kazyna Immovable Property Fund will stop financing private developers’ construction of commercial and rental housing with subsequent redemption (the period of redemption is up to 15 years) in 2017-2018.

Housing constructed under Objective 6 cannot be sold by a participant of the Programme for two years after its acquisition.

**Objective 7: To support shared housing construction.** To implement the mechanism that guarantees contributions of participants of shared housing construction, the Programme envisaged the capitalization of the Housing Construction Guarantee Fund to the value of KZT 10 billion in 2017. This Fund will impose qualification requirements on the participants of shared construction with regard to financial stability and experience, and will introduce mechanisms to monitor the proper use of shareholders’ money.
With regard to housing construction projects secured by guarantees of the Housing Construction Guarantee Fund, the HCSB is entitled to provide depositors with loans for the purchase of housing against security of claiming rights under partnership agreements.

_The pilot project of the demolition of unsafe housing in the city of Astana_

The pilot project of the demolition of unsafe housing was started by the akimat of the city of Astana in 2012 under the “Affordable Housing – 2020” Programme, and it continues under Nurly Zher.

The pilot project envisages the demolition of unsafe housing and the comprehensive reconstruction of old districts of the capital. There are plans to demolish 2,978 residential buildings, with a floor space of 588,000 square metres (11,264 apartments). The floor space of projected housing to replace the demolished housing will be 3.1 million square metres.

The pilot project envisages the construction of housing in the third and fourth classes of comfort, elite housing and business class buildings with office premises and parking areas, to be sold on the market for project reinvestment.

An authorized organization was established for the implementation of the project by the akimat of the city. It ensures the constructional design and construction of new residential buildings, and transfers some of the constructed residential and non-residential premises to the municipal ownership of the city of Astana for citizens to be relocated there from demolished unsafe housing and for the compensation of the cost of demolished non-residential premises. The remaining residential and non-residential premises are sold on the market by an authorized organization for the reinvestment of earned revenues.

Astan City akimat (i) as established by the law (“in case of district emergency scale”), withdraws premises in unsafe houses and buildings; (ii) identifies reconstruction areas, and allocates land parcels for construction; (iii) constructs engineering networks and ensures improvements; (iv) provides owners of apartments in unsafe buildings that are supposed to be demolished with housing from new and existing municipal housing stock; (v) refunds the value of withdrawn property to the owners of non-residential premises in unsafe houses or, with the consent of the owners of non-residential premises, provides equivalent non-residential premises in houses under construction.

Owners of apartments in unsafe buildings are provided with new apartments with floor space equal to those in the demolished ones, but not less than a one-room apartment.

To finance the pilot project in the context of the “Accessible Housing – 2020” Programme, the Samruk-Kazyna National Welfare Fund provided a loan of KZT 40 billion (KZT 20 billion a year in 2012 and 2014) to an authorized organization of the Astana City akimat. The Government provides targeted transfers from the republican budget to repay the obligations of the authorized organization to the Samruk-Kazyna National Welfare Fund to the value of KZT 40 billion (KZT 20 billion a year in 2013 and 2018).

In the future, the project is supposed to be financed through private investment, bank loans, targeted transfers from the republican and local budgets for the replenishment of authorized capital of the authorized organization, proceeds from the sale of residential and non-residential premises, and the provision of related services during the implementation of the project.
Chapter 3. Provision of Adequate, Safe and Affordable Housing and Basic Services

A. HOUSING PROVISION

At 1 January 2017, the total floor area of the housing stock was 342.6 million m². There were 5,115,260 houses in Kazakhstan at 1 January 2017, including 3,398,679 houses of urban housing stock and 1,716,581 houses of rural housing stock (calculated on the basis of the total population and an average household size of 3.6 persons). The average housing provision was comparatively high, at 21.4 m²/person; this indicator grew by 20 per cent compared to 2005 (17.5 m²/person). Nevertheless, there is significant demand for housing related to the population growth, migration and urbanization.

According to the Nurly Zher Housing Construction Programme (Nurly Zher), the number of citizens in need of housing reached 2.5 million (14% of the population) as of 1 December 2016. But this figure takes into account only (i) citizens registered LEAs as those in need of housing from the municipal housing stock (400,000 people), (ii) citizens with deposits in the Housing Construction Savings Bank (HCSB) (780,000 people), and (iii) citizens on the waiting list for land parcels for individual housing construction (1.3 million people). The actual need for the improvement of housing conditions could be much higher.

The housing provision rate in urban areas is higher than that in rural areas: the urban housing stock has a total floor area of 216.1 million m², which is 1.7 times larger than the area of the rural housing stock (126.5 million m²). Since 2005, the total housing stock floor area grew 34.56 per cent – urban areas, 38.79 per cent, and rural areas, 27.91 per cent (Figure 5). The rate of housing provision for the urban population increased by 25.7 per cent (18.7 m²/person) since 2005; for the rural population, it increased only by 11.9 per cent (15.9 m²/person). There are 23.5 m²/person in urban areas, compared to 17.8 m²/person in rural areas. Among urban human settlements, Astana (29.0 m²/person) and Almaty (27.0 m²/person) have the highest housing provision rates, while the Zhambyl Region in Southern Kazakhstan (18.8 m²/person) has the lowest rate. Among the rural areas, the Mangystau Region has the highest rate of housing provision (22.2 m²/person) while the Zhambyl Region has the lowest (14.3 m²/person).

\[\text{Nurly Zher was approved by Resolution No. 922 of the Government of the Republic of Kazakhstan, dated 31 December 2016.}\]
The urban housing stock is concentrated in the cities of Almaty (19.9 per cent of the total urban housing stock floor area), the South Kazakhstan Region (11.2 per cent), the Karaganda Region (10.7 per cent), and Astana (9.7 per cent). The largest portion of rural housing stock is located in the South Kazakhstan Region (18.4 per cent of the total rural housing stock floor area) and the Almaty Region (17.6 per cent).

Picture 1

Multi-apartment complex in the city of Astana, consisting of several buildings (an example of a successful placement of an apartment house on the embankment of the Grebnoy Canal).

Photo by: Alexander Belyi
Types and characteristics of residential buildings

Out of the total 2,276,782 residential buildings in Kazakhstan in 2017, 1,954,792 or 85.86 per cent were individual or single-family houses, and 321,990 or 14.14 per cent were multi-apartment houses. In terms of housing floor area, multi-apartment houses occupied 1.76 million m², or 51.43 per cent of the total, while the share of individual houses was 1.66 million m², or 48.57 per cent.

Out of the total number of residential buildings, 911,756, or 40.0 per cent, were in urban settlements. Urban residential buildings consisted of 136,946 apartment buildings (representing 15.02 per cent of all residential buildings in urban areas and 42.53 per cent of the total number of apartment buildings) and 774,810 individual houses (84.98 per cent of all residential buildings in urban areas and 39.64 per cent of the total number of individual houses). Apartment buildings in the two largest cities of the country alone – Almaty (28,448) and Astana (5,128) – made up 10.43 per cent of the total number of apartment buildings in Kazakhstan.

The share of individual residential houses with brick or stone exterior walls is 21.5 per cent of the total number of individual houses, and it is 31.4 per cent for multi-apartment houses. There were few large-panel, frame-panel or large-block prefabricated residential buildings (1.0 per cent of the total number of individual houses and 4.6 per cent of the total number of apartment buildings). The share of monolithic reinforced concrete multi-apartment houses is 5.45 per cent. According to statistics, the most significant portion of residential buildings consists of buildings with exterior walls of materials undefined in statistical reporting – 76.5 per cent of individual houses and 58.6 per cent of multi-apartment houses (Figure 6).

Figure 6
Classification of residential buildings by external wall materials

![Classification of residential buildings by external wall materials](image)


Housing stock development

The level of housing stock development is high (Table 1). Water is supplied to more than 99 per cent of multi-apartment and individual houses in urban settlements, and to more than 96 per cent of houses in rural human settlements. Between 2011 and 2016, the average housing water supply rate increased from 64.6 percent to 98.5 per cent.

The supply of central heating and hot water to apartments in urban areas was 89.7 per cent and 80.8 per cent, respectively. A high level of gasification (more than 95 per cent) of individual houses in both urban and rural settlements, as well as apartment houses in rural areas, allows the provision of heating and hot water supply from individual installations.

At the end of 2016, availability rate of central sewerage to the housing stock was still low. In urban areas, individual houses had a rate of 67.1 per cent, while in rural areas, both individual and multi-apartment houses had rates of 30.1 per cent and 44.1 per cent, respectively. However, it should be noted that the average sewerage availability rate of the housing stock increased from 44.7 per cent to 66.6 per cent between 2011 and 2016.

Table 1
Housing stock development as of 1 January 2017

<table>
<thead>
<tr>
<th>Type of amenities</th>
<th>Percentage of housing stock provided with various types of amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In urban settlements</td>
</tr>
<tr>
<td></td>
<td>Multi-apartment houses</td>
</tr>
<tr>
<td>Water supply(^1)</td>
<td>98.5</td>
</tr>
<tr>
<td>Waste-water disposal system(^2)</td>
<td>66.6</td>
</tr>
<tr>
<td>Central heating(^3)</td>
<td>40.7</td>
</tr>
<tr>
<td>Individual heating systems</td>
<td>59.6</td>
</tr>
<tr>
<td>Bathtub or shower</td>
<td>42.4</td>
</tr>
<tr>
<td>Central hot water supply</td>
<td>36.4</td>
</tr>
<tr>
<td>Hot water supply</td>
<td>12.0</td>
</tr>
<tr>
<td>from individual water heaters</td>
<td>87.8</td>
</tr>
<tr>
<td>Gas(^4)</td>
<td>10.4</td>
</tr>
</tbody>
</table>


Notes:
1. A dwelling is considered equipped with a water supply system if there is: running water in the house (apartment); a water pipe outside the house (apartment); and a distribution network, which receives water from a central water pipeline or an artesian well, or from a water column or another source of water in the yard if there is a well.

2. A dwelling is considered equipped with a central sewerage system if the house has a sewerage device for the discharge of black water to the street sewerage network or drain wells, and it is considered not equipped with a sewerage system if it does not have a water pipeline or a bio toilet.

3. A dwelling is considered equipped with a central heating system if the heating is supplied from a boiler room inside the building, a group (quarter), joint and district boiler house, or a thermal power plant.

4. A dwelling is considered equipped with a gas distribution system (with both pipeline and liquefied gas) if it has a floor-mounted gas stove.
Technical condition of the housing stock

Statistics on housing stock does not have information on the life span of residential buildings (breakdown of buildings by the year of commissioning). According to the 2009 census, housing stock constructed between 1960 and 1990 (consisting of 67.1 per cent of households) is predominant in Kazakhstan. In 2009, the share of households living in houses built before 1960 was 12.3 per cent, while the share of those living in houses built between 1991 and 2008 was 17.9 per cent.²⁹

In 2010, 50.1 million m² of multi-apartment buildings (32 per cent of the total) required refurbishment. In 2015, the share of the multi-apartment housing stock in need of refurbishment dropped to 27 per cent. In addition, poor energy efficiency is a common problem in most apartment buildings. According to a study³⁰ conducted in 2010, the consumption of thermal energy in apartment buildings is 270 kWh/m² per year, which is significantly higher than the European average rates of 100-120 kW/m² per year. About 30 per cent of heat is lost through the enclosing structures: facade walls, windows, roofing, basements, ground floors, and entrances of apartment buildings.

In 2017, 3,606 residential buildings with a total floor area of 1,590.7 thousand m² were dilapidated and in a critical condition, with 77,947 people living in these unsafe buildings. A large part of unsafe housing is concentrated in urban settlements. There are 2,621 unsafe buildings in urban settlements (72.68 per cent of the total number of unsafe residential buildings), occupying an area of 1,495.8 thousand m² (94 per cent of the total area of unsafe residential buildings) with 72,450 people living there (92.95 per cent of the total number of people living in unsafe residential buildings). The majority of unsafe residential buildings are located in Almaty – 1,867 thousand m², or 51.77 per cent of the total number, and 71.23 per cent in urban areas. The area of unsafe housing stock in Almaty is 1,138 m² (71.5 per cent of the total area of unsafe housing stock), 49,914 inhabitants (64 per cent of the total number of people living in unsafe housing). In rural human settlements, unsafe residential buildings numbered 985, with a total area of 95.0 thousand m² and 5,497 inhabitants.

B. SYSTEM OF HOMEOWNERSHIP AND REGISTRATION OF IMMOVABLE PROPERTY RIGHTS

Right of homeownership

In accordance with the law “On Housing Relations”, the housing stock in Kazakhstan is divided into:

1) public housing stock – state-owned housing, which is subdivided into:
   • municipal housing stock – dwellings under the jurisdiction of LEAs, reserved for special government agency citizens who are entitled to homes from this stock;
   • housing stock of state-owned enterprises – dwellings within the jurisdiction of state-owned enterprises;


³⁰ Belyi A. The interaction between parties is a necessary basis for the energy-efficiency retrofitting of apartment buildings. United Nations Development Programme in Kazakhstan, the Ministry of National Economy of the Republic of Kazakhstan, (Astana, 2014).
• housing stock of state agencies – dwellings within the jurisdiction of state agencies, including corporate housing that is on the balance sheet of state agencies and that is supposed to be provided by a decision of the housing commission to civil servants appointed to positions on a rotating basis for the period of performance of official duties without the right of further privatization;

2) private housing stock – dwellings in the ownership of individuals or non-state entities and their associations.

Kazakhstan, like other former Soviet republics, completed the privatization of its public housing stock as part of the housing reform in order to establish a housing market. Privatization was carried out through the “privatization coupon” mechanism. Citizens permanently residing in Kazakhstan were given privatization coupons in accordance with the duration of their employment. The cost of privatized housing was determined with regard to its accumulated depreciation. If citizens did not have enough coupons to buy homes, they paid in cash, as a lump sum or in instalments.

The privatization of public housing stock was carried out in accordance with the Rules of Privatization of Dwellings from the Public Housing Stock\(^{31}\). As a rule, privatization was carried out based on the depreciable value of the home. The privatization cost could be paid in instalments for a period of up to 10 years, with an initial contribution of at least 30 per cent. However, there are certain categories of citizens that could privatize housing free of charge.

At the beginning of 2017, 97.6 per cent of the housing stock was privately owned (Table 2). The share of public housing stock in urban areas (3.1 per cent) is higher than that in rural areas (1.1 per cent).

Table 2

<table>
<thead>
<tr>
<th>Housing stock ownership structure, as of 1 January 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of housing ownership</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>State ownership</td>
</tr>
<tr>
<td>Private property</td>
</tr>
</tbody>
</table>


The legislation of Kazakhstan does not contain any restrictions with regard to women’s titles to real property.

In accordance with Article 29 of the law “On Housing Relations”, the ownership of housing may be terminated, against the will of the owner in the following cases:

• foreclosure of the dwelling along with the land parcel due to debts of the owner;

• requisition – compulsory withdrawal of a dwelling from the owner due to emergency situations authorized by resolutions of state agencies in accordance with procedures established by legislative acts, and with the payment of the value of the withdrawn dwelling or other types of compensation;

\(^{31}\)Approved by Decree of the Government of the Republic of Kazakhstan No. 673 of 2 July 2013.
• confiscation;
• compulsory expropriation of the land parcel on which the house is located, for public use; or
• demolition of housing that is about to collapse (unsafe housing).

In cases 2 and 4 above, the owner could choose one of the following compensation options:

• monetary compensation paid prior to the termination of the ownership right, which includes the market value of the dwelling and land parcel, as well as full compensation of the losses inflicted on the owner\(^{32}\);
• housing with amenities (an apartment or a residential house) in accordance with the procedures established by law; or
• the return of the requisitioned housing after the emergency situation that caused the withdrawal is over, with full compensation of the owner for losses inflicted by the requisition.

**Registration of homeownership rights**

The right of homeownership and the encumbrance of immovable property rights are subject to state registration in accordance with the law “On State Registration of Rights to Immovable Property”.

Registration is a public service\(^{33}\) and it is provided, for a fee, by territorial justice authorities at the place where the property is located. Applications for registration are submitted:

• via the “Government for Citizens”, which accepts applications for the registration of rights to immovable property and distributes the deliverables at the location of the immovable property;
• via the e-government web portal at www.egov.kz (only by notaries who notarized the transactions); or
• by notaries. There is an established system of e-registration of immovable property rights with respect to transactions certified by a notary. Notaries provide this public service through the Notary Information System by sending an electronic copy of the property title to the Legal Cadastre System.

A prerequisite for the state registration of rights to immovable property is the state technical inspection of buildings, constructions and/or their components. The public technical inspection is carried out by Government for Citizens. The state technical inspection determines technical and identifying characteristics of buildings, structures and their components that are required for the maintenance of the legal cadastre, generates a technical certificate of an item of immovable property, and assigns a cadastral number to buildings, constructions or their components.

Rules and lead time for the state technical inspection of immovable property were approved by the Minister of Justice of the Republic of Kazakhstan on 6 May 2013, No. 156. State technical inspection takes from two working days (for the preparation of a technical certificate for an apartment or room) to nine working days (for the preparation of the technical certificate for

\(^{32}\) According to local experts, there are limitations with regard to the amount of monetary compensation payable to the owner following the withdrawal of a land parcel with a dwelling for public use.

\(^{33}\) The standards of the “State Registration of the Rights (Encumbrances) to Immovable Property” public service was approved by Order of the Minister of Justice of the Republic of Kazakhstan No. 246 of 28 April 2015.
items of immovable property with total area of more than 1,000 m²). The inspection includes a survey of the land parcel and the plotting of a schematic plan of the land parcel, survey (measuring) and floor plans of the item of immovable property. State technical inspection of immovable property is a paid service.

**Common Property Ownership in Multi-apartment Housing**

In accordance with the Law on Housing Relations (1997), if apartments (and non-residential premises) are individually owned by different persons (citizens), legal entities or the State, all homeowners in a multi-apartment house have shared ownership of the common property in the multi-apartment house. Such form of ownership of an item of immovable property, which combines individual homeownership rights of different persons and the right of shared ownership of all owners of common property in the building, is called a “condominium” in legislation. Thus, a single immovable property complex (a multi-apartment house) consisting of homes (apartments) that are individually owned by different persons, and common property, is called an “object of condominium”.

Common property of an object of condominium includes hallways, stairs, elevators, roofs, attics, basements, extra-apartment or communal engineering systems and equipment, and land, including amenities and other types of community property.

The share of each homeowner in the common property cannot be separated from the individual ownership of their home. The size of the share is determined by the ratio of the useful floor area in individual property to the total amount of useful floor area of all residential and non-residential rooms in the condominium. Such share cannot be singled out in kind (an ideal share). The transfer of homeownership to another person shall entail the transfer of the proportionate share in the common property to the acquirer.

**Registration of an Object of Condominium**

According to the Law of the Republic of Kazakhstan on Housing Relations (Article 32), an object of condominium, including an apartment in ownership and a common area share, should be registered as a single object in accordance with the legislation on state registration of rights to immovable property⁴⁴ (Article 39 of the Law on State Registration of Rights to Immovable Property).

The registration of the object of condominium is performed upon an application of a member of the condominium or an authorized representative of the owner(s). The composition of common property is identified during the registration of a condominium object (when a technical certificate of an apartment building is generated). During the initial registration of a condominium object, its technical certificate should be produced using budgetary funds.

Rules for the state registration of an object of condominium were approved by the Minister of Justice of the Republic of Kazakhstan on 24 August 2007, No. 241. The state registration of a condominium object requires entitling and identification documents with respect to the land parcel, if the title to the land parcel was not registered prior to the registration of the condominium object, and homeowners’ shares in the common property shall be determined by a homeowners’ agreement.

³⁴ The state registration of an object of condominium is regulated by Article 39 of Law of the Republic of Kazakhstan on State Registration of Rights to Immovable Property No. 310 of 26 July 2007.
The requirement in the legislation to register objects of condominium is difficult to implement in practice. According to 2009 data, only 8.5% (14,681) objects were registered, out of the total number of 172,164 apartment houses in urban areas, which were objects of condominiums. According to local experts, local authorities, housing inspections and managers of cooperatives of homeowners (apartment owners) have done a lot to register objects of condominiums recently. According to the information of the Association of Cooperatives of Apartment Owners of the Republic of Kazakhstan, in 2016, about 30% of objects of condominiums were registered countrywide, and about 80% in Astana. The increased share of registered objects of condominium is also linked to the fact that only after the registration of an object of condominium, can an apartment house be included in the refurbishment programme financed from budgetary funds (see Chapter 4, section B).

The chairs of the management boards of cooperatives of apartment owners explain the problems with registration of condominium objects by the fact that it is very difficult to hold a general meeting of owners to adopt a decision on the registration of a condominium object and to get the signatures of all homeowners in the document regulating the distribution of shares in the common property. Homeowners believe that registration of a condominium object is a documented confirmation of their responsibility for the proper maintenance and repair of the community property, and therefore, it results in an increase in the contributions for this purpose. Non-registration of an object of condominium is not an obstacle for transactions with homes in an apartment building and those with the registration of the right of individual ownership of an apartment; therefore, owners have no vested interest in the registration of an object of condominium.

The legislation considers an apartment (non-residential premises) in an apartment building to be a separate item of immovable property (a secondary item in the composition of a condominium object) in the individual ownership, which is assigned an individual cadastral number. Neither entitling or identification documents for the land parcel, which is part of the common property, nor confirmation of the state registration of a condominium object are required for the state registration of homeownership in the legal cadastre (Article 40 of the Law on State Registration of Rights to Immovable Property).

The Right to the Land Parcel on Which the Building Is Located

According to the Land Code of the Republic of Kazakhstan (2003), the ownership right to the building entails, in accordance with the procedures established by the legislation, the right of ownership to the land parcel on which the said building is located, except for the cases envisaged by the Code (Article 52). The right of public entities to economic activities or their right of operational administration with regard to buildings (structures, constructions) entails, in accordance with the established procedure, the right of permanent use of the land parcel occupied by the said objects. These rights are inseparable.

Transfer of the right of ownership, or the right of permanent use of land, or the right of temporary use of a land parcel on which buildings (structures, constructions) are located, and which is also allocated for their use without respective transfer of the said immovable property, as well as the transfer of immovable property without respective transfer of the land parcel where the said immovable property is located, shall not be permitted.

In accordance with the Law on Housing Relations (Article 19), the sale, donation, transfer by inheritance, or forced sale of residential house collateral, as well as that of an unfinished residential building, entail the transfer of the right of ownership (land use) of a land parcel to the new owner of the residential house.
A land parcel required for the placement, exploitation, and maintenance of an apartment building or other condominium object, in accordance with the established procedure, is transferred to the common shared ownership of owners of homes which are part of the condominium object (Article 62 of the Land Code). Transfer of ownership of an apartment (home) to another person involves the transfer of a corresponding share in the right to the land parcel (land parcels) to the buyer of the apartment (home).

The procedure of the use of a land parcel located outside of the boundaries of the footing of the building is determined by an agreement of the condominium members, upon condition of observing public interests, sanitary and hygienic, ecological, fire prevention, urban planning and other norms. The division of a land parcel that is part of a condominium object is permitted on written consent by all members of the condominium, provided that the sanitary, environmental, fire protection, construction and other standards and regulations are observed.

Regarding the land parcel at the building (structure, construction), the ownership can be separately rendered to the condominium members where it is necessary to meet technological requirements for the functionality of non-residential premises, as long as this land parcel is located outside the building (structure, construction) and its use is consistent with the conditions of use of the land parcel that is a part of the condominium object, as well as with sanitary and hygienic, environmental, fire protection, construction and other norms and regulations.

A land parcel for an individual residential building, or one that is a part of the common property of a condominium object (multi-apartment building), is made available for the ownership (or land use) by LEAs on the basis of a positive opinion of a commission established by LEAs, and pursuant to the land management project.

The boundaries of a land parcel in-situ are established on the basis of the application application in accordance with the procedure prescribed by the Legislation of the Republic of Kazakhstan.

Identification documents for the land parcel are produced and issued by Government for Citizens, which maintains the public land cadastre. An act for the right of private ownership of a land parcel is an identification document in the case of private ownership of a land parcel.

According to local experts, it is not difficult to register the rights of shared common ownership of condominium members for the land parcel under the apartment building, but it is still very difficult to resolve the issues related to the transfer of a part of the common property of a courtyard area, especially in big cities.

**Provision of Social and Affordable Housing**

Social housing in Kazakhstan is housing from public (municipal) housing stock. In accordance with the Law on Housing Relations (Articles 67 and 68), homes from municipal housing stock or homes rented by LEAs from private housing stock are provided for the use of citizens in need of housing who belong to the following categories:

1. Persons with disabilities and participants in the Great Patriotic War;
2. Orphaned children and children without parental care; and

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35 Regulations for land surveying activities in the Republic of Kazakhstan with respect to the development of draft projects of inter-farm land tenure in order to establish and streamline the existing land management, drainage and identification of the boundaries of land parcels in situ, were approved by the Order of the Chairman of Agency of the Republic of Kazakhstan for Land Resources Management No. 72-II-a of 7 October 2004, (as amended by the Order of the Minister of the National Economy of the Republic of Kazakhstan No. 782 of 22 December 2015.).
3. Socially vulnerable groups of citizens:

- persons with equal status with persons with disabilities and participants in the Great Patriotic War;
- persons with disabilities of groups 1 and 2;
- families with, or caring for, children with disabilities;
- persons with severe forms of some chronic diseases;
- retirement pensioners;
- oralmans (ethnic Kazakhs who returned to Kazakhstan for permanent residence in the historic homeland);
- persons who lost their homes as a result of environmental disasters, or natural or human-caused emergencies;
- large families (a family with four or more minor children living together);
- families of persons who died in the performance of government or public duties, military service, during the preparation of, or during, a flight into outer space, or rescuing human lives, or protecting the law; and
- single-parent households.

Persons from the above group are provided with social housing upon the condition that their joint average monthly income over the 12 months preceding their application for the provision of housing for all family members is lower than the 3.1-fold subsistence level established for the respective fiscal year by the Law on the Republican Budget.

4. Public servants, employees of budgetary organizations, military serviceman, cosmonaut candidates, cosmonauts, staff of special government agencies and holders of government elective offices (housing provided to such citizens from the municipal housing stock is equivalent to corporate housing); or

5. Citizens of the Republic of Kazakhstan whose one and only housing object is recognized as unsafe in accordance with the legislation of the Republic of Kazakhstan (when provided with housing from the municipal housing stock, such citizens transfer the unsafe housing they own to municipal ownership).

Thus, citizens belonging to a quite large list of categories have the right to housing from the public (municipal) housing stock. The right to social housing is not always associated with low income of households (low income is used as a registration criterion only for citizens belonging to a group of socially vulnerable citizens).

The registration of citizens who need housing from the municipal housing stock is carried out in their communities by district akimats, cities of regional significance, the cities of Astana and Almaty. To be registered, citizens are required to permanently reside in the human settlement, and not to have housing by right of ownership. For citizens to be registered in the cities of Astana and Almaty, they are required to permanently reside in these cities for at least three years. The requirement of permanent residence in a human settlement does not apply to citizens who changed their place of residence because of their participation in government employment programmes.

The lists of citizens who need housing are made separately for each of the above-mentioned groups of citizens, and are published on the websites of the akimats, as well as lists of citizens who obtained housing.
In accordance with the Law on Housing Relations (Article 75), the housing provided from the municipal housing stock should have floor space of not less than 15 square metres and not more than 18 square metres of usable floor area per person, but not less than a one-roomed apartment or a dormitory room.

According to the information provided in the Nurly Zhol Government Programme of Infrastructure Development in 2015–2019, between 2011 and 2015, the number of registered citizens who needed housing from the municipal housing stock of LEAs doubled, and it continues to grow. As of 1 January 2015, the number of citizens registered by the LEAs was more than 300,000, of which over 130,000 belonged to the socially vulnerable stratum of the population, 127,000 were employees of budgetary organizations and public servants, and 44,000 were orphaned children.

According to the housing administration of the Astana City akimat, in 2009, there were still people on the housing waiting list who filed their applications for housing back in 1986. Between 2009 and 2016, housing was provided to everyone who was included in the lists of those in need before 2005. Nevertheless, in 2016, there were approximately 43,000 people on the lists of those who needed housing because of significant migratory influx to the capital.

To provide housing to citizens registered with LEAs, the construction of communal housing through targeted transfers from the republican budget to local executive bodies was resumed in 2012. New municipal housing stock is provided to citizens with the lowest incomes. 10,600 citizens were provided with housing from the municipal housing stock between 2012 and 2015.36

Provision of housing to citizens placed on housing waiting lists in akimats is also carried out by constructing housing with limited floor areas of apartments and limited cost, at the expense of budgetary loans provided by LEAs and funds of companies with the participation of the State (development institutions). To ensure the return of the funds invested in the construction, such housing is provided to citizens for rent with a right of long-term redemption (15-20 years) at the expense of rental payments. At the beginning of 2015, about 1 million square metres of such rental housing was put into operation, and more than 16,000 citizens were provided with housing.

Housing affordability for citizens with low incomes is also ensured by the housing construction savings system, supported by the Government. To provide housing to depositors of the HCSB, organizations also construct housing with a limited floor area of apartments and limited cost, with the participation of the Government. Citizens can purchase such housing out of the accumulated funds and housing loans of the HCSB at an annual interest rate that is much lower than the market rate. At the beginning of 2015, 859,000 square metres of loan housing was put into operation, and more than 13,000 citizens were provided with housing.

Another possibility for citizens to purchase affordable housing is to construct individual housing on land parcels equipped with communal infrastructure, at the expense of budgetary funds.

Provision of Rental Housing

Rental housing includes housing of any type of ownership, offered for permanent or temporary possession and use for a fee.

State-owned rental housing (municipal housing stock and housing stock of state-owned enterprises and institutions) is only 2.4% of the total floor area of the housing stock.

36 According to the information of the Nuryl Zhol Government Programme.
A certain proportion of homes owned by citizens are used to be leased to other persons. There is no official information about the floor area of such private rental housing.

In 2014, the President of the Republic of Kazakhstan, in his message “Nurly Zhol is the path to the future”, emphasized that rental housing is one of the promising areas of housing construction. The rental housing constructed under government programmes (with the exception of housing in communal ownership) is supposed to be provided to citizens on housing waiting lists in akimats, and it is provided for rent with a right of redemption. That is, such housing is a rental only for a certain period of time, until it is redeemed at the expense of the rental payments; after redemption, the housing is no longer a rental and it becomes a home in the private ownership of citizens.

At present, there are no discussions about the establishment of a sector of affordable rental housing to meet the housing needs of citizens who are not entitled to social housing and cannot, or do not want to, acquire housing in their ownership.

Residential buildings for commercial rent are not constructed because private developers are not interested in such construction.

Thus, there is still a trend in Kazakhstan to increase the volume of housing in private ownership.

**Citizens’ Access to Public Services and the Quality of the Communal Infrastructure**

**Water Supply**

The objective of improving the population’s access to water supply services was formulated by the government Programme “Drinking water” (2001–2010), and was addressed by the Ak Bulak Programme (2011-2020), which became part of the 2020 Programme of Regional Development in 2014.

By the beginning of 2016, 87% of the urban population and 51.5% of the rural population had access to centralized water supply systems. In 2011, these figures were 82% and 42.5% respectively. Between 2011 and 2015, the number of citizens with access to the centralized water supply system increased by 1.3 million people.

The 2020 Programme of Regional Development plans the following indicators of access to the centralized water supply system in 2019: 97% for the urban population and 62% for the rural population. At the same time, the State Water Management Programme of Kazakhstan provides higher planned indicators of access to the centralized water supply system by 2020: 100% of the urban population and at least 80% of the rural population of the country.

As of 1 January 2017, there were 828 water supply enterprises in Kazakhstan.

In 2016, the centralized water system supplied the population with 470.44 million m$^3$ of water (42% of the total volume of water supplied to consumers). The average water output per day per person was 72.4 litres.

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According to official data\textsuperscript{42}, the quality of drinking water has been maintained at a stable level for several years. There is a laboratory control of all sources of drinking water, both centralized and decentralized (wells, springs).

The length of water supply networks was 70,708.0 km at the end of 2016, which is 22.3 per cent more than at the end of 2012. Between 2012 and 2016, 18,754.2 km of water supply networks were put into operation. The number of water supply network accidents decreased 9.4-fold (from 25,600 to 2,729 accidents per year) in this period, and reached 0.04 accidents/km of networks at the end of 2016. In 2015, the loss of water during its transportation decreased to 19 per cent, as planned by the 2020 Programme of Regional Development.

The share of water supply networks in Kazakhstan that needed replacement was 24.8 per cent at the end of 2016. In the city of Almaty, 60 per cent of water supply networks need replacing\textsuperscript{43}. Water supply networks in cities – regional centres, small towns and single-industry towns – are in poor technical condition: according to the 2020 Programme of Regional Development, the deterioration of water supply networks in many of them was 60 per cent to 80 per cent in 2015.

\textit{Sewerage}

In 2016, there were 307 sewerage enterprises in Kazakhstan\textsuperscript{44}; 82 per cent of the urban population and 11 per cent of the rural population had access to centralized water disposal (sewerage) systems. In 2011, these figures were 73 per cent and 8.8 per cent\textsuperscript{45}, respectively.

The 2020 Programme of Regional Development plans the following indicators of access to the centralized water disposal system in 2019: 97\% for the urban population and 13\% for the rural population\textsuperscript{46}.

The length of sewerage networks was 15,381 km at the end of 2016, which was 1.92\% more than at the end of 2012. Between 2012 and 2016, 988.3 km of sewerage networks were put into operation. The number of sewerage networks accidents decreased 47-fold (from 31,571 to 673 accidents per year) in this period, and reached 0.044 accidents/km of networks at the end of 2016.

The share of sewerage networks that needed replacement was 36.2 per cent at the beginning of 2016. 63 per cent of sewerage networks need replacing in Mangystau Region, and 45 per cent of networks in the city of Almaty\textsuperscript{47}. According to the 2020 Programme of Regional Development, the deterioration of sewerage networks in most cities (regional centres) was 60 per cent to 75 per cent in 2015.

The share of treated wastewater out of the total volume of wastewater in the central sewerage systems increased from 80.2 per cent to 83.7 per cent between 2012 and 2016, which indicates an improvement in the condition of the sewage treatment facilities. The share of treated wastewater is 100 per cent to 99 per cent in the cities of Astana and Almaty, the West Kazakhstan Region

\textsuperscript{43} Statistical reporting form 1-VC for 2015, source: http://stat.gov.kz/
\textsuperscript{46} The 2020 Program of Regional Development was approved by the Resolution of the Government of the Republic of Kazakhstan No. 728 of 28 June 2014 (as amended by the Resolution of the Government of the Republic of Kazakhstan No. 449 of 30 July 2016.).
and the Zhambyl Region. The lowest volume of treated wastewater is 35.5 per cent in the Atyrau Region.

Heat Supply

40.5 per cent of the housing stock in Kazakhstan is provided with a centralized heat supply. This figure has remained constant over the last five years. Centralized heat supply prevails in urban settlements (62.3 per cent of urban housing stock), and is practically non-existent in rural settlements (only 3.2 per cent of rural housing stock). The highest level of centralized heat availability can be found in the urban settlements of the Mangystau Region – 83.9 per cent of the urban housing stock of the region. The availability of centralized heat supply in the housing stock of the cities of Astana and Almaty is 76.3 per cent and 70.7 per cent, respectively.

In 2016, there were 2,207 sources of heat supply, and 64.0 million gigacalories of heat energy were generated, including 51.0 million gigacalories by thermal power plants (63 per cent), and 27.5 million gigacalories by boiler plants (34 per cent). The population consumes about 38 per cent of the heat energy supplied to consumers.

The total length of two-pipe heat supply networks is 11,400 kilometres. 317,6 kilometres of heat supply networks were put into operation in 2012–2016.

The share of heat supply networks in need of replacement increased from 26.5 per cent to 31.1 per cent between 2011 and 2015. The largest increase in the share of networks that required replacement was in Almaty – from 20.8 per cent to 56.6 per cent. At the same time, the share of networks that required replacement decreased in some regions. For example, this indicator decreased from 57.7 per cent to 30.8 per cent in the Almaty Region, and from 25.9 per cent to 4.9 per cent in the West Kazakhstan Region 48.

The number of heat supply network accidents decreased from 334 to 81 between 2012 and 2016. The loss of thermal energy in the heat supply networks increased from 13.83 per cent in 2012 to 12.66 per cent in 2016. The loss of thermal energy in 2016 amounted to 8.1 million gigacalories.

Power Supply

In 2015, the population was supplied with 11,115.5 million kWh of electric energy (13.5 per cent of the total volume of electricity supplied to consumers – 82,198.0 million kWh) 49. In 2016, the population was supplied with 12,204.2 million kWh of electric energy.

Electric energy is used in the housing stock of Kazakhstan mainly for lighting purposes. Only 10.4 per cent of the housing stock is equipped with floor-mounted electric stoves (15.7 per cent of the urban housing stock and 1.4 per cent of rural). In some regions, the use of electrical energy for cooking is significantly higher than across the board in the country: in the Pavlodar Region, 54.9 per cent of the housing stock (75.8 per cent of the urban housing stock and 3.5 per cent of rural) are equipped with floor-mounted electric stoves, while in Karaganda Oblast it is 27.2 per cent (32.12 per cent urban and 6.8 per cent rural). The Astana housing stock equipped with floor-mounted electric stoves increased from 33.0 per cent to 64.3 per cent between 2012 and 2016. During the same period, the share in Almaty decreased from 7.9 per cent to 1.7 per cent 50.

49  Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Housing and Utilities, (Astana), 64p.
The power supply sector has the largest share of networks requiring repair across the entire utility sector. Thus, 97,500 km, or 73 per cent, of 0.4 kV electric networks require repairs, out of a total length of 133,600 km. Moreover, 0.4 kV transformer substations, domestic switchgears and internal networks also require repairs.

Technological losses of electrical energy in electric networks decreased from 6.8 per cent to 5.1 per cent between 2011 and 2014. In Astana, the electrical energy losses in the networks decreased from 14.5 per cent to 6.5 per cent, while in Almaty, from 11 per cent to 5.5 per cent. The level of electrical energy losses remains high in some regions: 12.0 per cent in the Almaty Region, 10.7 per cent in the Akmola Region, 10.1 per cent in the West-Kazakhstan Region, and 8.2 per cent in the Karaganda Region.

Gas Supply

At the beginning of 2015, there were 44 natural gas distribution companies, and 18 liquefied gas distribution companies in Kazakhstan.

The number of human settlements supplied with natural gas increased from 751 to 934 (13.8 per cent out of the total of 6,785 human settlements in the country) between 2012 and 2016. The length of gas networks increased from 21,520 to 26,270 km. 10,090 km of gas networks were put into operation.

Citizens of 32 cities, 4 towns and 878 rural settlements use natural gas. Another 11 human settlements are supplied with liquefied gas.

In 2014, the population was supplied with 3,220.4 million m$^3$ of natural gas (37.3 per cent of the total volume of 8,639.4 million m$^3$ of natural gas supplied to consumers) and 18,375 tons of liquefied gas (77.7 per cent of the total of 23,644 tons of liquefied gas supplied to consumers).

The loss of natural gas amounted to 206.5 million m$^3$ in 2015 (2.4 per cent of the supplied volume of gas). The share of the street gas network needing repair was 2.1 per cent in 2015 (for comparison, 0.6 per cent of the street gas network needed repair in 2012).

Municipal infrastructure modernization and development programmes

To address the problem of the significant depreciation of the municipal infrastructure and to increase population’s access to public services, the Government adopted several state programmes. The State Programme of Modernization of Housing and Communal Services for 2011-2020 plans to modernize over 24,400 km of networks by 2015 (and another 6,700 km of networks within the Ak-Bulak Programme). The Programme aims to reduce the share of networks that need to be replaced: heat supply networks, down to 55 per cent by 2015 and 40 per cent in 2020; power supply networks, down to 68 per cent by 2015 and 53 per cent in 2020; gas supply networks, down to 51 per cent by 2015 and 38 per cent in 2020.

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52 Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Housing and Utilities, (Astana), 64p.
54 Statistics for 2015-2016 were not available.
56 2020 Program of Regional Development.
In 2014, the objectives of the Programme of Modernization of Housing and Communal Services related to the modernization (reconstruction and construction) of the municipal infrastructure became part of the new 2020 State Programme of Regional Development. This Programme planned to modernize 4 per cent of heat, power and gas supply networks in 2015, and later around 1.5 per cent of networks annually between 2016 and 2019. Over 1,500 km of heat supply networks, 12,000 km of power supply networks, 3,000 km of gas supply networks, about 8,800 km of water supply networks, and 1,200 km of water disposal networks are supposed to be modernized (constructed) under the programme between 2015 and 2019. By 2020, the number of water supply network accidents is supposed to be reduced to 0.3 per km of networks, for water disposal networks – 0.1 per km of total networks.

The modernization (reconstruction and construction) objectives related to the housing and utilities infrastructure, as well as heat and water supply and disposal systems, are addressed by the Nurly Zhol State Programme of Infrastructure Development for 2015-2019. This Programme plans to upgrade around 1,000 km of heat supply networks and about 6,000 km of water supply and disposal networks where losses and accidents indicators are at the highest. As a result, the depreciation of heat and water supply and disposal networks should decrease to 53 per cent (by contrast, the depreciation of networks amounted to 67 per cent in 2015) by 2020. The share of standardly treated sewage water in the discharge process should be 100 per cent in cities.

By and large, KZT 300 billion are allocated annually from the republican budget to the regions for the development of the engineering infrastructure. Infrastructure modernization and development projects are financed through budgetary loan facilities (via LEAs to housing and communal enterprises), subsidies (infrastructure subsidies from the republican budget), and loans from international financial organizations. The joint-stock company “Kazakhstan Center for Modernization and Development of Housing and Communal Services” is an operator that provides infrastructure grants (subsidies).

According to the CCHCS under the Ministry for Investments and Development, the European Bank for Reconstruction and Development is financing eight municipal infrastructure modernization projects in the regions of Kazakhstan for USD 109 million.

**Relations in the Provision of Public Services to the Population**

In accordance with the Law on Housing Relations of the Republic of Kazakhstan (1997), public services include not only services of water, sewerage, gas, electricity and heat supply provided to consumers, but also garbage disposal and elevator maintenance services.

Until recently, relations between the consumers of public services (citizens) and the providers of public services were regulated by the Rules of Utility Services Provision approved by the Government of the Republic of Kazakhstan dated 7 December 2000, No. 1822. In 2014, the Law of the Republic of Kazakhstan dated 29 September 2014, No. 239-V ZRK transferred the powers to approve the rules of utility services provision to local public authorities of the regions and cities of Astana and Almaty. Akimats of all regions, Astana and Almaty approved the rules of utility services provision in the relevant areas in 2014–2016. In fact, these rules repeat the text of the rules of utility services provision previously established by the Government (with the exception of the Rules of Utility Services Provision in the City of Almaty, which are approved by the Decree of the President of the Republic of Kazakhstan No. 1030 of 6 April 2015. Paragraph 10 of Article 2 of the Law on Housing Relations of the Republic of Kazakhstan No. 94 of 16 April 1997.

Approved by the Resolution of Akimat of the city of Almaty No. 2/186 of 11 May 2016.
differentiated by the types of utility services, and make use of the Rules of Electric Power Usage\textsuperscript{60}, the Rules of Heat Energy Usage\textsuperscript{61}, and other special regulatory documents).

In accordance with the legislation of Kazakhstan, utility services are provided on the basis of individual agreements between organizations providing utility services (utilities providers) and end consumers. Model agreements for providing consumers with utility services are developed and approved by an authorized government agency\textsuperscript{62}. Utility services for communal needs in multi-apartment housing are provided on the basis of agreements between utilities providers and a cooperative of homeowners or any other management authority of an apartment building. Requirements regarding consumer properties and the mode of service provision are established by standard technical documents (national standards and technical regulations).

Consumers are supposed to pay utility service bills issued by utilities providers every month on the basis of information from metering devices and the established rates for utility services. Metering devices are supposed to be installed by the utilities providers. In accordance with the regulations, users shall reimburse the cost of acquiring and installing meters to the providers through the rate of the relevant utility service. However, between 1 July 2012 and 1 January 2014, low-income families living in privatized apartments and individual residential houses, partially housing assisted\textsuperscript{63} and at the expense of the local budgets, were provided with compensation for the cost of single-phase electrical energy meters with an accuracy class of not lower than 1, with differentiated readings and time-based energy consumption controls, installed to replace single-phase electrical energy meters in the 2.5 accuracy class, in accordance with the invoice provided by the supplier of electrical energy\textsuperscript{64}. This means that the cost of replacement of outdated electrical energy meters has not been included in the electrical energy tariffs.

Although the statistical information is not available, according to local experts, homes are fully equipped with electric and gas metering devices. 79 per cent of consumers (88 per cent of the urban population and 71 per cent of the rural) were provided with water metering devices in 2015\textsuperscript{65}. The 2020 Programme of Regional Development plans to provide 95 per cent of consumers with water metering devices by 2019.

Utility service providers are required to monitor the consumption of utility services and consumers’ payments, and are entitled to suspend the provision of services if a consumer fails to pay for the services within the time limit stipulated in the agreement.

The system of direct contractual relations between utility service providers and citizens assumes that consumers receive separate bills for each type of utility services. According to the Rules of Utility Services Provision in the City of Astana\textsuperscript{66}, the city established a universal payments centre to service consumers and to issue a single billing document (invoice) to pay for all utility and housing services. The objective of the universal payments centre is to form a single database of the users of all utility services, which provides information on the number of residents in apartments and homes (residential buildings), the total floor area of apartments and homes, the level of their improvement, the types of utility services, standard rates of service consumption

\textsuperscript{60} Approved by the Order of the Minister of National Economy of the Republic of Kazakhstan No. 143 of 25 February 2015.
\textsuperscript{61} Approved by the Order of the Minister of Energy of the Republic of Kazakhstan No. 211 of 18 December 2014.
\textsuperscript{62} Model agreements for the provision of utility services were approved by the Order of the acting Minister of National Economy of the Republic of Kazakhstan No. 266 of 27 March 2015.
\textsuperscript{63} Housing assistance is a benefit to low-income families to pay for housing and communal services.
\textsuperscript{64} In accordance with Law No. 542-IV of the Republic of Kazakhstan as of 13 January 2012.
\textsuperscript{66} Approved by the Resolution of Astana City Akimat No. 115-638 of 30 April 2015.
(if any), the amounts of utility services consumed, the assessed amounts, payments made, information about metering devices and their readings, details of concluded utility services agreements, and other information. This database belongs to the LEA (Astana City Akimat).

The universal payments centre operates on the basis of agreements with utility services providers and housing services providers. In accordance with concluded agreements, the centre has the following functions: to keep records of consumers of utility services; to organize the process of concluding utility services agreements with consumers; to take readings and check metering devices; to calculate (recalculate) utility payments for the provided services and present them for payment to consumers; to generate, print, and deliver a single billing document (invoice) to each consumer; to organize the collection of payments for utility services through second-tier banks and other organizations with relevant licenses; to collect bills receivable for delivered utility services from consumers in accordance with pre-trial and legal procedures; to accept consumers’ applications for customer support services; to organize the operation of a call centre; to analyse the actual volumes of, and payments for, provided utility services; and to ensure communication between consumers and service providers.

The legislatively defined system of relations between providers of public services and organizations that manage apartment buildings seems to be contradictory. On the one hand, the rules of utility services provision approved by the Government (2000), and then by the LEAs (2014–2016), established that it is the responsibility of the utility services provider to ensure proper technical maintenance and safety of communal networks and metering devices, and it is fulfilled on the basis of a separate agreement with the cooperative of apartment owners or other authorized representatives of consumers. This means that there is supposed to be a paid services agreement between a house management organization and the utility services provider and, under this agreement, the provider is obliged to maintain interior networks through which utility services are delivered to consumers in an apartment building either independently (if it has a permission to do so) or using the resources of a specialized organization that has a license to engage in these activities. The cooperative of apartment owners is supposed to pay for this work from the contributions of homeowners for the maintenance of community property. On the other hand, in accordance with the powers established by the Law on Housing Relations of the Republic of Kazakhstan, the authorized government agency approved model agreements of cooperation between condominium management authorities and market entities that provide utility services to end consumers. According to these model agreements, utility services providers are entitled to maintain internal engineering networks, through which services are provided to consumers, and to organize the validation and verification of communal metering devices. The organization managing the apartment building is obliged to preserve and ensure the proper technical condition and operation of internal networks (independently or with the assistance of third parties to complete repairs and service checks). Model cooperation agreements do not suggest any financial relationship between the providers of the public services and the condominium management authorities.

It is not clear from the text of the model agreements of cooperation between condominium object management authorities and market entities providing utility services to end consumers why there is a need for, and what is, the value of the cooperation between these organizations. In addition, when cooperation agreements are made, and management authorities of apartment buildings assume obligations to ensure the proper technical condition of the internal networks,
it is not established who is liable to the end consumers for the violation of the provision mode or the quality of the utility services – the provider of municipal services or the condominium management authority – how those responsible are identified, and how losses incurred by the party not at fault are compensated.

**Tariffs Policy**

Pursuant to the Law on Housing Relations of the Republic of Kazakhstan, payments for utility services in dwellings of all forms of ownership are charged at rates approved in accordance with procedures established by the Government. This procedure is established under the Rules of Approval of Tariffs (Prices, Rates of Charges) and Tariff Estimates of Regulated Services (Goods, Works) of Natural Monopoly Entities.\(^{70}\)

In accordance with the Law on Natural Monopolies of the Republic of Kazakhstan dated 9 July 1998, No. 272, the approval of tariffs for public services for end consumers is within the scope of the functions of the Committee on Regulation of Natural Monopolies and Protection of Competition under the MoNE of the Republic of Kazakhstan. To approve new tariffs, the utility enterprise is required to attach draft tariffs and tariff estimates for the provided services and other substantiating documents to its application. Tariff estimates are developed in accordance with the Special Costing Procedure used to approve tariffs (prices, rates of charges) for regulated services (goods, works) of natural monopolies entities.\(^{72}\) The Committee on Regulation of Natural Monopolies and Protection of Competition then makes an expert examination of draft tariffs and tariff estimates and submits the draft tariff proposed by utility enterprise for discussion at a public hearing.\(^{73}\)

A public-private partnership agreement (concession agreement) stipulates the procedure of formulation and approval of tariffs for regulated services (goods, works) of natural monopolies entities operating under the public-private partnership agreement, including the concession agreement.

There is a special procedure for the approval of threshold levels of tariffs for a five-year term or longer for holders of natural monopolies that implement investment projects and bring in borrowed assets from international financial organizations.\(^{74}\)

The legislation permits establishing tariffs for utility services, differentiated by consumer groups or consumption volume, and other indicators (by day zones, availability or non-availability of a metering device), as well as establishing investment rates (if there is an approved investment programme) until full cost recovery of investments made.

\(^{70}\) Approved by the Order of Chairman of the Agency of the Republic of Kazakhstan on Regulation of Natural Monopolies No. 215-OD of 19 July 2013, (as amended by the Order of the acting Minister of National Economy of the Republic of Kazakhstan No. 273 of 27 March 2015).

\(^{71}\) As amended by the Law of the Republic of Kazakhstan No. 376-V of 29 October 2015 (effective as of 1 January 2017).

\(^{72}\) Approved by the Order of Chairman of the Agency of the Republic of Kazakhstan on Regulation of Natural Monopolies No. 130-OD of 25 April 2013.

\(^{73}\) Rules of public hearings during the consideration of applications for the approval of tariffs (prices, rates of charges) or their threshold levels with regard to regulated services (goods, works) of natural monopoly entities, as well as draft prices for goods (works, services) of regulated market entities in the electrical energy industry, were approved by the Order of the Minister of National Economy of the Republic of Kazakhstan No. 219 of 17 March 2015.

\(^{74}\) A special procedure for regulation of the activities of natural monopolies holders bringing in loans from international financial organizations included in the list of natural monopolies holders bringing in loans from international organizations, was approved by the Order of acting Minister of National Economy of the Republic of Kazakhstan No. 710 of 24 November 2015.
Tariffs for utility services in Kazakhstan are not subsidized from the budget, but, when establishing tariffs, cross-subsidization is widely used: tariffs for the population are set below the economically feasible level, while tariffs for other groups of consumers are set above the economically feasible level (Annex 1).

Tariffs applied to the services of centralized water supply and disposal, heating, power and natural gas supply are differentiated with respect to consumer groups. Some areas have universal tariffs for certain types of utility resources for all consumer groups.

Over five years (from 2011 to 2015), average tariffs for cold water supply increased by 33 per cent; for water disposal, 55 per cent; for heat supply, 32 per cent; for hot water and power supply, 29 per cent; and for gas supply, 36 per cent. Inflation for the same period amounted to 36 per cent. At the same time, the growth of tariffs did not substantially increase the cost burden of housing and utility services for the population. Such costs amounted to 3.7 per cent of nominal money income and 7 per cent of consumer spending in 2015.

The existing tariffs for municipal services only cover the operating activities of the public utility companies. The established tariffs prevent utility enterprises from making the required investment in the development and upgrading of the municipal infrastructure, with the result that the municipal sector is financed from the budget. At the same time, the statistics on the unprofitability of public utility enterprises demonstrate that the financial conditions of all utility enterprises have been deteriorating for the last five years.

According to the Committee on Regulation of Natural Monopolies and Protection of Competition under the MoNE, there are plans to eliminate cross-subsidization step by step when establishing differentiated tariffs for public services for different consumer groups, and to move towards economically justified tariffs, while improving the system of social assistance for the population.

Providing Budgetary Subsidies to Cover the Costs of Public Utilities and Housing Maintenance

With regard to payments for housing and utility services (the affordability of housing and utility services), the tariffs for utility services for the population are kept low to support the population; this is done through cross-tariff subsidies to various consumer groups, and direct budget subsidies and loans to utility enterprises, as well as subsidies to the families whose incomes are low because they have to pay for housing and utility services.

Pursuant to the Law of the Republic of Kazakhstan on Housing Relations (Article 97), the Government takes measures to provide assistance to low-income families (citizens) to pay for the maintenance of the community property of a condominium object, utility services, and telephone service, and to pay rental fees for the use of a house from the private housing stock, which is leased by LEAs (what is known as “housing assistance”).

The availability of housing assistance (a subsidy) depends not only on the household income and the cost of housing and utility services, but also on other characteristics of the household. Thus, when calculating the entitlement to housing assistance, the cost of maintaining the community property of a condominium object (in an apartment building) is only taken into account for owners of privatized homes and tenants of homes from the public housing stock. Rental costs are taken into consideration only for those citizens whose housing is provided by LEAs, which rent homes from the private housing stock. When providing housing assistance, only utility costs are taken into consideration for low-income households.
Pursuant to the Rules of Housing Assistance Provision\(^75\), the right to such budgetary subsidy belongs to households whose expenses for the established list of housing and utility services exceed the maximum permissible level of expenses for these purposes in the aggregate income of the family. Housing assistance is provided from the local budget. To provide housing assistance, local representative authorities (maslikhats) of cities and districts establish a maximum permissible level of household payments for housing and public services. At the national level, there is no normative or recommendatory document for local representative authorities to stipulate the percentage of maximum permissible expenses of the family for the calculation of housing assistance. The maximum permissible level of households’ expenditure on housing and public services, which is established by the decision of a maslikhat, varies from 2 per cent to 20 per cent. The most typical figure for this indicator is 10 per cent to 15 per cent. In Almaty, the share of families’ maximum permissible expenses for utility and other services is set at 10 per cent, while in Astana it is 8 per cent. Differences in the rules of housing assistance provision, adopted by local representative authorities, resulted in an extremely high level of regional differentiation with regard to the share of housing assistance recipients – from 0.2 per cent in Almaty to 5.6 per cent of households in the Zhambyl Region.

Housing assistance is allocated by the LEA of a city or a district, whose powers include the social protection of the population. Citizens’ applications for housing assistance are submitted to, and notices of housing assistance are issued by the non-profit Government for Citizens or through the e-government web portal (www.egov.kz). The allocation of housing assistance is a public service, and is carried out in line with the approved standard for the provision of public services\(^76\).

According to the Ministry of Labour and Social Protection of the Population, the number of households that receive housing assistance more than halved between 2008 and 2015, and by 35 per cent over the past five years: while in 2011 the housing assistance was allocated to 145,000 households, in 2015 it was allocated only to 93,900 (about 2 per cent of all households). At present, the share of housing assistance recipients is less than that of the population with incomes below the subsistence level (2.7 per cent). According to the expert assessment based upon the per-capita-income distribution of households, around 17 per cent of all households could claim housing assistance under existing conditions.

Over this period, the average amount of allocated housing assistance increased by 28 per cent – from KZT 1,697.9 per month in 2011 to KZT 2,179 per month in 2015. Housing assistance mainly compensates household for their expenses for utility bills. In 2015, expenses for utility services amounted to 95.92 per cent of the gross volume of housing assistance allocated to urban households, and 81.42 per cent of that to rural households.

Within the programme of technical assistance to the Government in reforming tariff policies and regulating the activities of natural monopolies in the municipal sector, the European Bank for Reconstruction and Development is currently assisting the Government in improving the system of social support for the population with regard to the payments for housing and communal services.

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\(^75\) The Rules of Housing Assistance provisions were approved by Resolution of the Government of the Republic of Kazakhstan No. 2314 of 30 December 2009.

\(^76\) The standard for the “Allocation of Housing Assistance” public service was approved by the Order of the Minister of National Economy of the Republic of Kazakhstan No. 319 of 9 April 2015. Available from http://adilet.zan.kz/rus/docs/V1500011015#z6
Chapter 4. Housing Management and Maintenance

A. FRAMEWORK OF HOUSING STOCK MANAGEMENT

Pursuant to Article 6 of the Law on Housing Relations, housing stock is managed directly by the owner or through authorities established (appointed, elected) by the owner, as well as through proxies.

For an apartment building that is an object of a condominium, Article 42 of the Law envisages the following forms of management:

- direct joint management by all owners, if there are not more than 20 of them;
- cooperative of homeowners (apartment owners);
- condominium management by third parties: elected or hired individuals – managers of residential houses or legal entities; and
- other forms which are consistent with legislation (various forms of cooperatives are created in practice).

The Law defines an individual or legal entity exercising the functions of condominium object management as a “condominium object management authority”.

Within a month of the establishment of the condominium, homeowners of an apartment building should choose their form of condominium management at their general meeting. If homeowners of an apartment building come to an agreement on the form of its management, and condominium was established following the privatization of homes, the privatizing authority can suggest that homeowners establish a cooperative of homeowners (apartment owners) or engage a manager. For new apartment buildings put into operation after the completion of the construction, a housing inspection authority shall identify an organization to maintain the house for a period of three months, if homeowners have not chosen the form of management. In this case, the maintenance organization also performs the condominium management functions.

Article 42-1 of the Law identifies a list of issues related to the management and maintenance of apartment buildings which require the approval of a general meeting. Such issues include:

1) the choice, or changing the form, of condominium management;
2) the approval and management of contributions regarding the maintenance of the common property of the condominium;
3) the decision on the conclusion, amendment or termination of the condominium management contract;
4) changes to the legal cadastre by judicial authorities [to establish and change the size of shares in the right to the community property in a multi-family house];
5) changes to the residential building (expansion, modernization, technical upgrade, reconstruction, restoration, refurbishment);
6) the identification of the amount of monthly contributions for the refurbishment of the common property of the condominium object or for the accumulation of funds in the savings account for refurbishment;
7) the expenditure of money accrued on the savings account;

77 In accordance with the amendments made to the Law on Housing Relations by the Law of the Republic of Kazakhstan No. 270 (V) of 29 December 2014.
8) the choice, and/or refusal, of the services of a maintenance organization; and

9) the approval of the cost estimate for the refurbishment of the common property of the condominium.

A homeowner in an apartment building shall have one vote at the general meeting. If a homeowner owns more than one apartment in the building, he or she would have as many votes as number of apartments owned in the condominium.

According to the Law, the general meeting is authorized to adopt decisions only if at least two thirds of the homeowners are present. Making a decision requires a majority of the votes of the participants of the meeting. However, if at least one fifth of the votes out of the total number of votes of all homeowners is submitted against the proposed decision when considering items 2, 6, 7, 8 and 9 from the list of items mentioned above, the Law requires the item to be reconsidered at the general meeting. Taking a decision during the reconsideration requires at least two thirds in its favour out of the total number of votes of homeowners. Because there are complicated rules established in respect of the issues related to homeowners’ expenses on the management, maintenance and refurbishment of common property, it is difficult to make decisions on such items at the general meeting.

If it is not possible to get a quorum at a general meeting, the Law provides the possibility of adopting decisions by a written survey of homeowners. It is required that at least two thirds of homeowners take part in such a survey, and the decision is adopted if it is voted for by more than a half of the homeowners in an apartment building. Thus, a decision by written survey requires more votes than adopting it during a meeting.

Local experts note that difficulties with decision-making during general meetings of homeowners of apartment buildings result from excessive requirements of the Law regarding the quorum of the general meeting and the number of votes required for decision-making, as well as from poor engagement by homeowners.

The Law regulates the establishment and activities of a co-operative of homeowners (a widely-used abbreviation is CHO). A CHO is a non-profit organization established by homeowners for the joint management of the community property of an object of condominium. The Law permits the establishment of a CHO to manage not only a single apartment building, but also a group building. Taking a decision on the establishment of a CHO requires at least two thirds of the votes of the statutory meeting participants. The statutory meeting should be attended by at least half of the homeowners or their proxies. If the general meeting cannot be held, a written survey of more than two thirds of the owners should be conducted. The CHO shall acquire the rights of a legal entity from the date of its registration.

The Law does not explicitly determine whether CHO membership is compulsory for all homeowners after its establishment. Given that the Law stipulates that a CHO member is a homeowner in a condominium object, and a founder of the cooperative or a member of the cooperative admitted on the basis of submitted application, it is possible to conclude that membership in the CHO is voluntary. As a consequence, following the establishment of CHO, the decision-making powers related to the management of apartment buildings belong to two different general meetings with different compositions of participants – a general meeting of homeowners of apartment buildings and a general meeting of cooperative members. There is no clear delineation of the powers of these two general meetings, which seems to be especially important if a CHO manages several apartment buildings, and homeowners from different buildings take part in the general meeting of the CHO members. It is not specified whether the decision of the general meeting of one of the apartment buildings is binding for the CHO.
The decision-making rules of the general meeting of CHO members are as complicated as those of the general meeting of homeowners, and the required number of votes to take a decision is also high (for the most important issues, it is at least two thirds of the votes of the cooperative members). Therefore, the establishment of a CHO does not provide a quick and easy way of taking decisions regarding the management of apartment buildings.

In the legislation of Kazakhstan, the CHO is regarded as a non-profit management organization rather than a method of self-organization of homeowners in an apartment building for the joint management of shared property and representation of common interests. To increase the professional level of CHO activities, the housing inspection authority is granted the right to recommend to the general meeting of homeowners a candidate for the position of the chairman of the board of the cooperative, who is supposed to meet the qualification requirements established by an authorized government agency.

The Law does not differentiate between CHOs and third parties engaged for management (managers, managers of organizations) when regulating the activities of condominium object management. Thus, the amendments made to the Law on Housing Relations in 2014 prohibited the condominium management authorities, including CHOs, from independent maintenance of the common property in apartment buildings that they manage. It is required to conclude agreements with service providers and service companies for the maintenance and repair of the common property. The management authorities, including CHOs, are supposed to open a separate bank account for each apartment building (condominium object), for homeowners to make payments for the maintenance and repair of the common property of the apartment building. However, it is not specified that the funds in such bank accounts belong to the homeowners of an apartment building and cannot be spent on the needs of other apartment buildings.

In general, the legislative regulation of the issues related to the management of apartment buildings is quite complicated, and it establishes excessive requirements for decision-making by the owners of the common property in apartment houses, and unwarranted restrictions about the activities of cooperatives of apartment owners. However, there is no regulation of the issues concerning multi-house CHOs in particular. All of this results in quite serious problems in the management and maintenance of apartment buildings.

Despite numerous changes made to the Law on Housing Relations, local experts and representatives of CHOs believe that it is essential to continue with further comprehensive changes to the legislation related to the management of apartment buildings and CHO activities.

The Law envisages government control of housing stock management. The control is effected by housing inspection authorities of local executive bodies (akimats). Housing inspection authorities inspect the technical condition of apartment buildings, the observance of the rules of condominium common property management, and the activities of management authorities. The inspections are made in accordance with the Entrepreneurial Code of the Republic of Kazakhstan.

Currently, the law “On Amendments and Additions to Some Legislative Acts of the Republic of Kazakhstan on Housing and Communal Services” is being drafted. It aims to reform the existing system of housing relations. Draft law suggests to systematize the mechanism of cooperation of the condominium’s management bodies with the entities of mutual relations; to modernize system of savings accounts; to define the foundations for accountability of the heads of management bodies and owners of the premises (apartments), to optimize the form of management bodies; to create conditions for the development of service activities for the residential buildings’ maintenance.

78 Until 2017, the authorized state body in the field of housing relations was the MoNE; at present, it is the Ministry for Investments and Development.
CHO associations are the predominant form of managing apartment buildings/items of condominium in Kazakhstan. According to the information of the CHO Association of Astana, about 340 CHO associations operate in the capital, and about 2,400 across Kazakhstan.

Large scale establishment of CHO associations was the result of the changes to the apartment buildings management system after the privatization of the public housing stock, when CHOs were established by the decision “from above” to replace public housing maintenance organizations, and not as a result of the independent choice of homeowners in apartment buildings. Many apartment buildings were transferred to the management of such CHOs (50-70 houses in one CHO).

Later on, there began to emerge CHOs created on the initiative of homeowners of a single apartment building or a small number of buildings; these were detached from large CHOs. Information and the methodical activities of several UNDP projects in Kazakhstan contributed to the creation of single-house and small CHOs. Some CHOs have good experience of interaction with the homeowners and their engagement in making decisions about the management of their houses. Several CHOs took part in UNDP demonstration projects to improve the energy-efficiency of apartment buildings.

With the support of the UNDP, CHO associations of Kazakhstan, CHO associations of Astana and Almaty, and regional and city associations were established. CHO associations are engaged in the dissemination of legal and methodological information among CHOs and apartment owners to exchange best practices. They currently represent the interests of homeowners and their non-profit unions in dialogue with central and local public authorities, including the development of apartment building management legislation.

Despite the success of some single-house and small CHOs, so far, multi-house CHOs dominate the management sphere. The Programme of Modernization of Housing and Communal Services of the Republic of Kazakhstan in 2011-2020 noted that one of the problems of apartment building management and maintenance is that CHOs have a monopolistic position in the market, providing management services, and maintaining and repairing apartment buildings using their own resources. Apartment owners are dissatisfied with the poor quality of CHO services. This results in poor collection of homeowners’ payments for the maintenance and repair of apartment buildings. At the same time, the Programme noted low activity of apartment owners in managing their houses: they do not make decisions about changing the form of management, and do not accumulate funds for refurbishment.

To improve the management and maintenance of apartment buildings, there was a proposal to legally divide the condominium management functions and the maintenance and repair works between different service-providers. In 2011, relevant amendments were made to the Law on Housing Relations: control functions are supposed to be executed by a condominium management authority (it can be either a CHO or an employed manager or a managing organization), and the management authority is supposed to enter into agreements with service providers to ensure the maintenance and repair of an apartment building. A list of management functions for apartment buildings was enclosed as an annex to the model condominium management agreement. The following documents were developed and approved:

80 The standard form of condominium management agreement was approved by Decree of the Chairman of the Agency for Construction and Housing and Communal Services of the Republic of Kazakhstan No. 338 of 13 September 2011.
• the rules regarding the maintenance of the common property of a condominium object\(^{81}\);
• the methodology of the organization of activities of the CHOs and the management authorities of condominium objects\(^{82}\); and
• the methodology of calculating the cost estimates for the maintenance of the common property of an object of condominium\(^{83}\).

To test the new system of the management and maintenance of apartment buildings, JSC “Kazakhstan Centre for Modernization and Development of Housing and Communal Services”, within the Programme of Modernization of Housing and Communal Services of the Republic of Kazakhstan in 2011-2020, implemented several pilot projects in Karaganda and Shymkent to establish and engage service companies in the management, maintenance and repair of apartment buildings. The pilot projects were implemented for apartment buildings which were refurbished under the government refurbishment programme. According to local experts, after the completion of the refurbishment of apartment buildings, the service companies stopped their management and maintenance activities in those buildings.

The legislative requirements with regard to the separation of the management and maintenance functions in apartment buildings between CHOs and for-profit service organizations are not enforced in practice. CHOs, even those managing few houses, continue to exercise not only the functions of apartment building management, but also those of its maintenance and repair. To this end, CHOs, in addition to the administrative staff, hire operational staff – plumbers, electricians, cleaners and janitors. Contracting agencies are engaged for the maintenance of elevators, solid waste removal and refurbishment works.

The legislative requirements related to the opening of a separate bank account for each multi-apartment building in the CHO is also not fully enforced. Chairpersons of CHO boards see no point in opening such accounts because their opening and banking services result in additional CHO costs, which homeowners do not want to pay for. At the same time, a separate account of a house does not protect the interests of the homeowners in that house because the funds in the account belong to the CHO, and CHO creditors’ claims are satisfied from these funds, even if they are not related to the maintenance costs of that particular apartment building.

Poor engagement of service companies in the management and maintenance of apartment houses managed by CHOs results because the decision to employ these companies should be taken at a general meeting. If no decision is taken, the CHO continues to manage and maintain apartment buildings at its sole discretion. However, the management and maintenance of apartment houses by CHOs has no appeal for private business because of the small amount of contributions homeowners make to CHOs.

Private managers and service organizations operate in new apartment complexes. Such organizations are often established by developers.

\(^{81}\) The Rules of Management of Common Property of Condominium Object were approved by Resolution of the Government of the Republic of Kazakhstan dated 1 December 2011, No. 1421. The current version of the Rules was approved by Decree of the Minister of National Economy of the Republic of Kazakhstan No. 108 of 19 February 2015.

\(^{82}\) The methodology of the organization of the activities of CHOs and condominium object management authorities was approved by Order of the acting Chairman of the Agency for Construction and Housing and Communal Services of the Republic of Kazakhstan No. 606 of 29 December 2010.

\(^{83}\) The methodology of calculating the cost estimates for the maintenance of the common property of an object of condominium was approved by Order of the Chairman of the Agency for Construction and Housing and Communal Services of the Republic of Kazakhstan No. 479 of 12 December 2011. The new revision of the methodology was approved by Order of an acting Minister of National Economy of the Republic of Kazakhstan No. 246 of 26 March 2015.
In 2012, an Association of Managers and Service Companies of Kazakhstan was established, which brought together 34 managers and service organizations. Its main goal is to improve the efficiency of the management and maintenance system of apartment houses. The objectives of the Association are as follows: to create a market of housing and communal services; to develop an evaluation system of the effectiveness of managers and service companies; to shape reasonable pricing in the market; to participate in the elaboration of proposals for the improvement of normative and legal regulations for the management and maintenance of housing stock; and to provide legal and consulting support to Association members and staff of member organizations. The Association is working to establish a national Register of Housing Managers and Service Organizations, which shall include the companies proved to be bona fide participants in the market of apartment building management and maintenance. The purpose of the Register is to prove the expertise of managers and service organizations to customers and homeowners in apartment buildings, and to make available information about organizations with a bad record.

Currently, a training program is being developed under the specialization “Condominium Manager”. This specialization was added to the classifier of post-secondary technical and professional specialties and professions.

Picture 2
432 apartment house in Astana managed with the involvement of a management company

*Photo by: Alexander Belyi.*

**Charges for the Management and Maintenance of Common Property in Apartment Buildings**

According to statistics, the average payment for management, maintenance and repair of an apartment building across Kazakhstan amounted to 22 tenge/m² in 2015, and in 2016 it amounted to 24 tenge/m².

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84 Housing and communal services in Kazakhstan. Available from http://usk.zhkh.kz/
increased to 25 tenge/m², mainly due to the increase in Almaty (from 23 to 40 tenge/m²) and Astana (from 34 to 43 tenge/m²). In cities – regional centres – the payment varied four-fold: with the minimum value of 10 tenge/m² in the cities of Kyzylorda and Taraz, and the maximum value of 38 tenge/m² in the city of Kostanay. In Almaty, the average payment is 23 tenge/m², while in Astana it is 34 tenge/m². On average, the structure of household expenditure on housing and communal services did not change in 2016.

In 2015, the maintenance fee was only 11 per cent of expenditure for housing and utility services; it increased by 2 percentage points compared to 2011 (Figure 7).

Although the average payment for management, maintenance and minor repairs of common property in apartment buildings (25 tenge/m²) increased by 67.7 per cent in 2016 compared to 2011 (15 tenge/m²), the amount of payments is still very low. It does not ensure the delivery of all services and works for the proper maintenance of the common property. For comparison, the payment for a service company’s package of management, maintenance and minor repair services in new residential neighbourhoods in Astana is 140 tenge/m².

The chair of the CHO boards talk about enormous difficulties in making decisions to increase the contributions for the management and maintenance of the common property at the general meetings of homeowners in apartment buildings. Homeowners still do not understand their responsibility for the condition of their apartment buildings; they expect the State to provide them with new housing if their housing becomes unsafe.

It should be noted that the legislation of Kazakhstan permits imposing a court-enforced collection on the owner’s apartment for debts related to the payment of mandatory contributions for the maintenance of the common property in an apartment building (Article 50 of the Law on Housing Relations). The court-enforced collection is imposed according to the procedure established by the Law of the Republic of Kazakhstan on the Mortgage of Immovable Property.

**Figure 7. Pattern of spending on housing and communal services per m² of home floor space in apartment buildings**

![Pattern of spending on housing and communal services per m² of home floor space in apartment buildings](image)

**Source:** Housing and Utilities, Statistical Compendium, Astana, 2016, calculations of the Institute for Urban Economics (Russia).

**Note:** The pattern of spending was calculated for homes with centralized cold and hot water supply systems, sewerage, heating, gas and power supply systems. The calculations use average values of housing provision: 18.7 m²/person and 21.0 m²/person in 2011 and 2015, respectively.
Information Systems

In accordance with the Law on Housing Relations (Article 7), the public registration of housing stock is required. The rules of public registration were approved in 2015\textsuperscript{86}. The main objective of this registration is to obtain information about the availability, location, quantity and quality, technical condition, level of improvement and cost of housing in all forms of ownership, and about changes in these indicators.

The public registration of housing stock is carried out through the statistical register of housing stock, which is formed on the basis of data from the Public Database of Register of Immovable Property of the Ministry of Justice, and information from LEAs about unsafe houses, accountancy records in human settlements, and nationwide statistical observations. Maintenance of the statistical register of the housing stock is the responsibility of the Statistics Committee of the MoNE. Statistical information on the status of the housing stock is subject to dissemination in accordance with the statistical action plan for the relevant year.

Information related to the housing sector is also contained in the following public cadastres:

- Legal Cadastre, which contains information on existing and terminated rights to immovable property, identification characteristics of immovable property, information about rightholders, and information about pending requests for information from the Legal Cadastre;
- Public Land Cadastre, which contains information about the location, intended use, size and boundaries of land parcels, their quality characteristics, the land management and cadastral value of land parcels, as well as about holders of rights to land parcels; and
- Public Urban Development Cadastre, which contains cartographic, statistical and textual information about the areas of urban, architectural and construction activities, the social and legal mode of land use, the level of engineering and technical provision, the parameters and status of objects located there, as well as the natural and climatic conditions and environmental status of the areas.

The Ministry of Justice shapes the legal cadastre information system, and establishes the rules of interaction between authorized agencies which organize the maintenance of the land cadastre (the Ministry of Agriculture), the public urban development cadastre (the Ministry for Investments and Development), other public central and LEAs, Government for Citizens, which carries out public technical inspections of items of immovable property, and registration authorities to exchange information for the maintenance of legal and other cadastres.

The Law on State Registration of Rights to Immovable Property (Article 17) establishes a list of government agencies and persons to whom information can be provided from the Legal Cadastre on the basis of a motivated request. Condominium members only get a certificate of registered rights (encumbrances) to immovable property and its technical characteristics. The authority of a member of a condominium object to obtain information is supported by the provision of a legal document or a notarized copy of the document of that condominium member’s title to a secondary item of immovable property (home in an apartment building) or the minutes of the general meeting of condominium members, confirming the powers of the representatives of the condominium members.

A request for a hard copy of information from the Legal Cadastre should be sent to the local justice authority in the area where the immovable property is located. The data is presented in

\textsuperscript{86} The Universal Rules of State Registration of the Housing Stock of the Republic of Kazakhstan were approved by Order of the Minister of National Economy of the Republic of Kazakhstan No. 110 of 19 February 2015.
the form of an information summary. The information can also be obtained electronically from Government for Citizens, or through the e-government portal if the applicant has an electronic digital signature. The information from the Legal Cadastre of public registration of rights to immovable property is provided free of charge.

Government for Citizens is an information system that makes the public technical inspection of buildings and their components (including multi-family houses – condominium objects), as well as land parcels, issues technical certificates of items of immovable property, and duplicates copies of technical certificates.

B. REFURBISHMENT AND MODERNIZATION OF THE HOUSING STOCK

In accordance with legislation, homeowners are supposed to refurbish their homes at their own expense. In apartment buildings (condominium objects), homeowners are required to bear the costs of major repairs of the common property in proportion to their share of common property ownership. Due to the fact that homeowners in apartment buildings did not take independent decisions about the refurbishment for a long time, as well as about the accumulation of funds for refurbishment, the Law on Housing Relations was amended in 2011, and now homeowners in apartment buildings are obliged to make a monthly contribution for refurbishment in the amount determined by the general meeting of the homeowners, but not less than the 0.02-fold monthly calculated rate established by the Law on Republican Budget for the respective fiscal year, and calculated per square metre of useful space of residential (non-residential) premises. To accumulate funds for the refurbishment of common property in apartment building, a CHO (or other management authority) is required to open separate bank savings accounts for each apartment building it manages. Funds accumulated in these accounts are spent only upon the decision of the general meeting taken by a majority vote of the homeowners of the condominium object.

Currently, the legislative requirements of the monthly contributions to generate savings for refurbishment are not fully enforced. This is due to the fact that, even though the Law established mandatory payment of such contributions, the decision on the amount of the contribution must be taken by the general meeting of homeowners. If such a decision is not adopted, the contributions are not paid. Homeowners do not take decisions because the requirement of contributions for refurbishment proved to be too high in comparison with the payment for the maintenance and minor repairs of the common property. Thus, based on the amount of the calculated monthly rate of 1,852, 1,982 and 2,121 tenge established by the 2014, 2015 and 2016 laws on national budget, the contributions for refurbishment in said years should be not less than 37.04 tenge/m², 39.64 tenge/m², and 42.42 tenge/m², respectively. For comparison, an average payment for the management, maintenance and repair of common property was 21, 22 and 25 tenge/m² in 2014, 2015 and 2016, respectively.

In practice, the decision on the contributions for refurbishment is taken by the homeowners of apartment buildings which are refurbished under government programmes.

Refurbishment of apartment buildings was originally envisaged by the Program of Modernization of Housing and Communal Services of the Republic of Kazakhstan in 2011–2020, which was approved by Resolution of the Government of the Republic of Kazakhstan dated 30 April 2011, No. 473. In 2014, following the adoption of the 2020 Program of Regional Development (approved by the Government on 28 June 2014, No. 728), the Program of Modernization of

87 This indicator is designed for the calculation of allowances and other social payments, penalties, taxes and other payments.
Housing and Communal Services was abolished, and the refurbishment objectives for apartment buildings with elements of thermal modernization were included in the 2020 Program of Regional Development.

The Program of Modernization of Housing and Communal Services planned to reduce the share of apartment buildings in need of refurbishment from 32 per cent in 2011 to 22 per cent in 2015. The 2020 Program of Regional Development plans to reduce this figure from 27 per cent in 2015 to 21 per cent in 2019.

Both these government programmes use the same organizational and financial mechanism of refurbishment:

- refurbishment of the common property in apartment buildings is carried out by specialized authorized organizations established in the regions and cities of Astana and Almaty, the authorized capital of which was formed with government participation (under the Program of Modernization of Housing and Communal Services of the Republic of Kazakhstan in 2011-2020, it was permitted to establish social business corporations with the participation of the Government in the authorized capital). The specialized authorized organization exercises the functions of a general contractor and, if necessary, can employ subcontractors. It provides design specifications and estimates for the refurbishment of apartment buildings. These undergo government expert review and are agreed with the akimat’s housing inspection authorities, and, later, with the homeowners of the apartment buildings.

- to finance the refurbishment of apartment buildings carried out by a specialized authorized organization, LEAs are provided with targeted transfers allocated from the national budget. Then, homeowners in the apartment building reimburse the costs of the refurbishment by paying contributions for the refurbishment for 8–15 years (depending on the list of completed works). The funds returned by the homeowners in the renovated houses are then used by the specialized authorized organization to repair other apartment buildings.

- to include an apartment building in a refurbishment programme, it must be registered as an object of condominium. At their general meeting, homeowners in an apartment building are required to take decisions (by a majority of not less than two thirds of the votes) (i) on the consent for the refurbishment of the common property of the condominium object at the expense of budgetary funds; (ii) on the list of the refurbishment works (minimum or maximum); (iii) on the cost of repairs required for each apartment (home) and the amount of monthly contributions for the refurbishment; and (iv) on the selection of homeowners’ representatives who participate in the acceptance of works.

- all homeowners in the apartment building and the CHO are required to conclude a refurbishment contract with a specialized authorized organization. Pursuant to these agreements, homeowners are required to pay monthly contributions for the refurbishment into a savings account at the bank. The CHO is required to open a savings account and transfer funds from the savings account of the specialized authorized organization to pay for the completed works, as well as to collect arrears on the payment of contributions from homeowners who did not sign a contract with the specialized authorized organization. Low-income apartment owners can receive budgetary subsidies (housing assistance) to pay their contributions for the refurbishment from local budgets.

- LEAs, on the basis of homeowners’ applications, generate a list of houses that are subject to refurbishment, prepare a financial and economic assessment and generate a budgetary request to the authorized housing and communal authority to receive funds from the
national budget in order to increase the authorized capital of a specialized authorized organization. Design specifications and estimates for the refurbishment are developed at the expense of the local budget.

- LEAs check the refurbishment progress and establish a commission for the acceptance of completed works with the participation of representatives of the housing inspection authority and departments of the akimat that oversee this programme, state architectural and construction supervision authorities, engineering supervision authorities, CHOs, and homeowners elected at the general meeting.

In accordance with the government programme, the refurbishment of the common property of a condominium object from budgetary funds is completed upon the condition that the thermal characteristics of the apartment building are improved as a result of such repairs, and community heat meters, as well as an automated system for heat consumption regulation (if centralized heat supply is available), are installed. The programme envisages awareness raising campaigns to promote energy saving among the population, and to engage homeowners in apartment buildings in making decisions on the energy-efficiency retrofitting during the refurbishment.

Homeowners of apartment buildings included in the government refurbishment programme can choose a minimum or maximum list of works that will be completed during the refurbishment. The minimum list of works includes repair of the roof (insulation), repair of the entrance (replacement of windows, doors, and lighting equipment for energy-efficient ones), repair of the basement (including repair of utility networks), and installation of a community heat meter and an automated heat management system. The maximum list of works includes advanced repairs of the façade and elevator.

LEAs are required to conduct an energy audit of apartment buildings before and after the refurbishment to assess the reduction of energy consumption as a result of the renovation. To this end, LEAs are allocated targeted transfers from the national budget.

Thus, Kazakhstan applies an administrative and centralized approach to the financing and refurbishment of apartment buildings. Refurbishment is financed entirely from budgetary funds (upon the condition of their return to the homeowners in several years) and through authorized government organizations. The role of homeowners and CHOs has been reduced mainly to the payment of contributions to reimburse the budgetary funds spent on the refurbishment. There are no requirements regarding the preliminary accumulation of funds for refurbishment by the homeowners as a precondition for granting budgetary resources. It does not address the problem of establishing a refurbishment loan granting system by the banks with parallel government support of owners in multi-family houses to ensure the transition to market mechanisms and to increase the volumes of refurbishment and modernization of the multi-family housing stock.

According to information from open sources, there are many complaints about the quality of repairs and the inflated cost. Local experts and representatives of CHOs feel that the efficiency of the budgetary funds allocated for the refurbishment could be much higher if they were provided directly to the CHOs.
Chapter 5. Housing Construction

A. CONSTRUCTION REQUIREMENTS AND PROCEDURES

State regulation of construction activities

The Law of the Republic of Kazakhstan No. 242 on Architectural, Urban-Planning and Building Activities in the Republic of Kazakhstan of 16 July 2001 is the basic law regulating construction-related relations. Moreover, regulation by the Government is ensured by a system of normative documents on architectural, urban planning and construction activities.

These include:

• normative legal acts that establish mandatory requirements for the organization of activities, and regulate relations between architectural, urban planning and construction entities; state urban development norms and regulations; technical design and construction regulations (for buildings, structures, their complexes, and communications); standards of government architectural and construction inspection; departmental regulations for other government inspection agencies; construction guidelines;

• regulatory technical documents that establish mandatory safety requirements for certain types of products and/or their life cycle processes in line with the requirements of technical regulations (for buildings, structures, their complexes, and communications) – construction norms (CN); construction norms and regulations (SNIП); operation flow charts; construction pricing regulations;

• optional regulatory technical documents: codes of practice for design and construction activities; legal and technical manuals; engineering standards; normative standardization documents for architectural, urban planning and construction activities, industry, building materials, products and structures; manuals and guidelines that contain practice-tested provisions for the development and enforcement of mandatory requirements for technical regulations and building codes, or for some individual issues that are not regulated by mandatory standards; and

• basic safety requirements for construction projects were established by the technical regulations entitled “Safety Requirements for Buildings and Structures, Building Materials and Products”, and were approved by Decree of the Government of the Republic of Kazakhstan dated 17 November 2010, No. 1202. Residential buildings are designed and constructed in accordance with the following normative and technical documents:
  – SNIП of RK 3.02-43-2007 “Residential Buildings”;
  – SNIП of RK 3.02-27-2004 “Single-Family Houses”; and
  – Construction Norms (CN) of RK 02-2013 3.02 “Technical Requirements for Housing”.

Certain issues related to the design of structures, fire protection, thermal protection, lighting, noise protection, and utility provision for residential buildings, are governed by the relevant national regulations.

Design and construction activities in zones (areas) of high seismic hazard take into account the requirements contained in government architectural, urban planning and construction standards regulating these issues.

Normative documents on construction pricing shall be used if the construction is financed by public funds and by funds of organizations with state participation (quasi-public sector entities).
In accordance with the Kazakhstan-2050 strategy and the National Plan – 100 Specific Steps to Implement Five Institutional Reforms, Kazakhstan is currently:

- implementing a phased transition to the system of European codes to replace outdated building codes and regulations; and
- introducing an input method to estimate construction costs on the basis of the real market value of materials, products, equipment and labour.

**Construction-related procedures**

The Law on Architectural, Town-planning and Construction Activity (Article 68) defines the main requirements regarding construction procedures. Procedures, terms of registration and the issuance of documents required for the construction of new objects and the modification of existing ones are established by the Rules for Housing Development and Licensing Procedures in the Construction Sector.  

Customers (individuals or legal entities) intending to construct an object are required to obtain a decision granting the right to a land parcel from the local district/city executive authorities (with the exception of construction on land parcels owned by customers). In accordance with the Land Code of the Republic of Kazakhstan (2003), it is prohibited to allocate land parcels for construction projects if there are no draft detailed plans or master plans for human settlements (or substitutionary development schemes for human settlements with up to 5,000 people).

Land parcels for individual housing construction may be allocated at sites equipped with water and electricity supply networks. In human settlements where there is no centralized water supply, such land parcels may be allocated only if there are power supply networks. Land parcels of 0.10 hectares for individual housing construction are granted to citizens free of charge for their private ownership.

Land parcels may be used by the owners or land users for development (including communications-laying, engineering preparation of the site, improvement, planting and other types of site development) only in accordance with approved construction project documents. Project design and estimate documents shall contain spatial-planning, design, manufacturing, engineering, environmental, economic, energy-saving and other solutions, as well as estimated costs of construction, engineering preparation, and improvement activities.

A construction project shall be developed on the basis of a decision granting the right to a land parcel, a customer-approved design assignment, technical specifications for access to engineering support facilities and utility services, and the requirements of an architectural and planning assignment issued to the customer by LEAs, as well as the requirements of government standards for architecture, urban planning and construction activities.

The prepared project design and estimate documents shall be submitted for adjustment, comprehensive non-departmental examination and approval in accordance with the requirements established by government regulations.

Project design and estimate documents, which are not used to start construction activities for three or more years after they were produced, are considered outdated and can be used for construction only after a new examination and re-approval, as required by law.

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88 The latest version of the Rules for Housing Development and Licensing Procedures in the Construction Sector was approved by Order of the MoNE of the Republic of Kazakhstan No. 750 of 30 November 2015.
Upon agreement with LEAs, a customer (an owner) may construct an individual residential house without project documents using sketches (sketch projects), with the exception of construction in zones of high seismic hazard or other special geological (hydrogeological) and geotechnical conditions requiring special design solutions and measures to implement them. In the capital, the city of Astana, and in areas of high seismic hazard or other geological (hydrogeological) and hydrotechnical conditions, individual houses are constructed in accordance with project documents, which are subject to mandatory examination.

Project documents are examined to evaluate the quality of the projects, the compliance of design solutions to the provisions of source design documents prescribed by legislation, and the compliance of design solutions and calculations with the requirements of planning and technical regulations, rules and regulations of governmental and intergovernmental normative documents.

Comprehensive non-departmental examination of construction projects is carried out by expert organizations, and is performed by experts attested in relevant sections (parts) of feasibility studies or design and estimate documentation. The state monopoly includes a comprehensive non-departmental examination of projects (feasibility studies and design and estimate documentation) for the construction of new industrial buildings and structures classified as potentially hazardous construction projects, as well as new technically and/or technologically complex objects, their complexes, engineering and transport communications, regardless of the sources of financing.

The examination of projects for the construction of technically simple objects is not mandatory; this includes individual houses (except for individual houses in the city of Astana) funded without the contribution of the budgetary funds or other forms of public investment.

Prior to the commencement of construction and installation activities, the customer is obliged to notify government architectural and construction inspecting authorities of such activities.

The construction process is inspected and supervised by architectural and construction authorities.

Upon its completion, the object shall be accepted into service if there is a statement of its compliance with the approved project, and a document certifying the quality of construction works and the compliance of such works with the approved project. Acceptance of the completed object shall be recorded in an act, which is to be approved by the customer. The act of acceptance of the completed object shall be signed by the customer, contractor (primary contractor), and technical and architectural supervisors.

The owner (customer) shall independently accept completed, technically simple objects, including individual houses and other buildings designed for the personal use of citizens. This rule shall not apply to the acceptance into service of individual residential houses constructed at the expense of public investment or with their contribution, or individual residential houses constructed in areas of high seismic hazard or areas with other special geological (hydrogeological) or geotechnical conditions.

The act of acceptance of the constructed object by the owner is to be mandatorily registered with local architecture and urban development executive authorities. The approved act of acceptance of the constructed object is the basis for its registration of rights to immovable property with an official registration authority.
**Inspection and supervision**

The construction project owner shall organize the technical supervision of the construction activities (independently or with the assistance of engineering companies) and the designer’s supervision by the developers of the project documentation under a contract with the customer.

State architectural and construction inspection shall be provided by:

- an authorized agency for architecture, urban development and construction (Construction, Housing and Communal Services and Land Management Committee of the Ministry for Investments and Development), which also monitors the activities of LEAs performing architecture, urban planning, and construction control functions and ensuring government architectural and construction inspection; and

- local architecture and urban planning executive authorities within their supervisory responsibilities.

The functions of government architectural and construction inspection are exercised by the State Architecture and Construction Inspection, in-house experts of the national authorized authority on architecture, urban planning and construction and LEAs.

The State Architecture and Construction Inspection consists of:

- a structural unit of the national authorized authority on architecture, urban planning and construction; and

- a LEA of a region, a city of national significance, or the capital, which ensures government architectural and construction inspection of the quality of constructed objects.

The functions of government architectural and construction inspection (state construction inspectors) are as follows:

- to monitor objects under construction (reconstruction, expansion, retrofitting, overhaul) and those put into operation;

- to apply measures required by law with respect to legal entities and officials who committed non-correctable violations or failed to correct violations within the prescribed standard deadlines;

- to monitor the activities of organizations providing technical and architectural supervision; and

- to oversee the organization and implementation of technical and designer’s inspections by customers (owners) at construction sites.

Government architectural and construction control takes the form of technical inspection as well as other forms. The inspections are carried out in accordance with the Entrepreneurial Code of the Republic of Kazakhstan.

Government architectural and construction inspection shall not inspect the construction of individual houses and other technically simple buildings designed for private use by citizens, with the exception of construction in zones of high seismic hazard or areas with other special geological (hydrogeological) and geotechnical conditions requiring special design solutions and measures to implement them, individual houses constructed in the capital, and those constructed at the expense of budget funds.
According to an expert opinion, in practice, when there is a significant share of objects with a normal risk rating and there is a lack of inspectors of the government architectural and construction inspection, the government control is carried out primarily through the examination of documents and information requested from customers, contractors and representatives of designer’s and technical inspection agencies. Therefore, the quality of control depends upon the reliability of the provided information. Some experts suggest that it would be important to make designer’s and technical inspection independent from the customer, as well as to determine liability mechanisms for each party of the construction activities (architects, designers, builders, engineers, engineering and construction organizations) with regard to the customer prior to the expiration of the guarantee period.

Licensing

In accordance with legislation, individuals and legal entities must have relevant licenses to develop pre-project and project (design) documentation, and to carry out construction and installation works.

The licenses take into account the qualification requirements for persons engaged in design, construction and installation activities, depending on the criticality rating of the design and construction objects. Licenses specify the criticality rating of objects, which may be designed or constructed by licensees.

The licensing of architectural, urban planning and construction activities is carried out by LEAs of regions, and the cities of Astana and Almaty, which are responsible for architectural and construction inspection.

Administrative barriers in the construction sector

In recent years, much has been done to remove administrative barriers in the construction sector. An easier procedure of allocating land parcels for housing construction, including individual housing construction, was introduced. Land parcels are allocated to citizens and legal entities under the “single window” principle through Government for Citizens or the e-government web portal.

To ensure access to land parcels for housing construction under the Nurly Zher State Housing Construction Program, it was stipulated that local authorities should:

• make an inspection of existing land parcels suitable for large-scale construction;
• identify priority areas for the large-scale construction of residential buildings in line with the approved master plans and detailed planning projects;
• complete the preliminary preparation of land parcels; and
• ensure free access to information on the availability of land parcels.

To reduce developers’ expenses, land parcels allocated for housing construction should be equipped with engineering and utility infrastructure, including heat, water, gas and electricity supply networks, telephone networks, sewerage (sanitation), engineering structures, internal roads and driveways, prior to the construction of residential houses. Engineering and utility infrastructures are designed and constructed at the expense of the national and local budgets.

In accordance with the Kazakhstan-2050 strategy and the National Plan – “100 Specific Steps to Implement Five Institutional Reforms”, the legislation was amended, and a “single-window” principle was implemented for construction permits, and the terms required to obtain permits in LEAs were reduced. Construction permission documents are obtained through Government for citizens or the e-government web portal. The new regulations identify three key stages and deadlines for obtaining design and construction approval documents:

- the issuance of an architectural and planning assignment: the time required for the issuance of design approval documents has been more than halved, from 40 to 15-17 working days, depending on the complexity of the object;
- the approval of a sketch project: the time required for the approval of a sketch project has been reduced from 60 to 10-15 working days, depending on the complexity of the project; and
- the issuance of a construction permit: the procedure of the issuance of construction permits (in paper form) is replaced by notifications of the commencement of construction filed by customers to the government architectural and construction inspecting agencies (electronically) through the e-government portal. If customers have all preliminary permission documents, projects and examination findings, they have the right to proceed with the construction of the object immediately upon filing the notification.

As a result of the reforms in the construction sector, Kazakhstan was ranked 22nd in the Doing Business 2017 report, a surge from 152nd position in 2015.

In line with the objective to phase-out the state monopoly regarding examining pre-project and project documentation, some necessary amendments were made to the legislation; rules were approved for the accreditation of expert organizations (2015); and a Chamber of Accredited Expert Organizations was established. According to the results over ten months in 2016, 69 organizations were accredited to make an expert examination of projects; they examined 4,700 projects, and issued 1,774 conclusions. It is planned that 90 per cent of projects will be examined by private agencies by 2020. The state expert inspection will cover only unique, technically and technologically sophisticated objects.

B. HOUSING DEMAND AND SUPPLY

According to the information provided in the Nurly Zher State Housing Construction Program, demand for residential housing significantly exceeds supply. This can be seen indirectly in the housing availability indicator, which was at 21 m² per person in 2015 and 21.4 m² per person in 2016. It is lower than in Russia (23.4 m²), Poland (25 m²), the People’s Republic of China (32 m²), and Germany (39 m²).

According to statistics⁹⁰, the period between 2006 and 2013 saw an annual construction rate of about 400 m² of housing per 1,000 persons of the resident population, and in 2014 and 2015 this figure increased to 434.7 m² and 509.6 m², respectively, and in 2016 it was 590.8 m². It is believed that it is necessary to construct approximately 1 m² of housing per inhabitant per year to fundamentally improve housing availability in one generation. Thus, Kazakhstan will need to nearly double the volume of housing construction.

The ability to meet the current housing demand on the primary market is significantly constrained by the low purchasing capacity of the population with regard to the cost of housing offered by private developers. According to the statistics provided in the Nurly Zher Programme, housing prices on the primary market increased by 1.3 times in 2016 as compared to 2013: from KZT 189,100 to KZT 248,200 per m². The highest prices can be found in Astana (KZT 339,800), Atyrau (KZT 326,300), Almaty (KZT 304,500), and Aktau (KZT 297,100); and the prices are the lowest in Taldykorgan and Zhezkazgan, approximately KZT 90,000 per m². New luxury and higher comfort housing is available to a small percentage of the population with high income. This demand has almost been satisfied. According to local experts, in the past two to three years, private developers have been having difficulties in selling completed houses and are taking steps to divide larger apartments into smaller ones to make them more affordable.

The 2011 research found that about 70 per cent of the economically active population are not able to purchase housing on the market even under relatively mild mortgage conditions (a period of 15 years, at 12 per cent per annum). Therefore, state programmes have been aimed at addressing the challenges of improving housing affordability for the population. Budgetary funds and finances from quasi-governmental organizations are used to construct economy-class housing (housing in the 3rd and 4th classes of comfort, with limited floor area and fixed cost). Such construction activities provide housing to the participants of the housing savings system, as well as to citizens on the waiting lists of LEAs who do not belong to socially vulnerable groups of the population. Such housing is available to citizens whose incomes are sufficient to repay a housing loan or redeem provided rental housing within the prescribed period (up to 15-20 years).

Budgetary funds are also used to construct housing for socially vulnerable groups of citizens registered in the files of LEAs; such housing is provided for rent without the right of redemption (social housing from the public housing stock). However, the volumes of social housing construction cannot not fully satisfy the housing needs of such citizens. Even the capital, which has the largest volume of housing construction, cannot yet provide housing to the eligible citizens registered 10 years ago.

Given the fact that the Government’s efforts to construct rental and mortgage housing still cannot satisfy the housing needs of low-income urban dwellers who do not belong to socially vulnerable groups, and do not address the needs of rural dwellers, individual housing construction is considered to be the most feasible way to meet housing needs. In urban human settlements, especially in large cities, this method is constrained by the lack of urban land parcels for individual housing construction, while in rural areas it is constrained by law provisions stipulating that LEAs should firstly provide land parcels for individual housing construction with the communal infrastructure. It can be expected that individual residential houses, especially in rural areas, will be more affordable for the population due to the annual planned allocation of funds from the national budget (under the Nurly Zher Programme) to LEAs to assure the construction of water and electricity networks at around 40,000 land parcels designated for individual housing construction.

C. PUBLIC AND PRIVATE HOUSING CONSTRUCTION

Because of the crisis and the drastic decrease of state participation in housing construction financing, Kazakhstan saw a significant decline in housing construction from 1991 to 1999. The annual volume of housing put into service during this period decreased from 6.13 million m² in 1991 to 1.11 million m² in 1999 (18 per cent of the 1991 level). Since 2000, the volume of
housing construction has gradually begun to increase due to the construction of multi-apartment buildings by private developers and the construction of residential houses by individual developers. However, up until 2006, the annual volume of housing put into service was below the 1991 level.

According to statistics\(^{91}\), 6.2-6.8 million m\(^2\) of housing were put into service annually between 2006 and 2013, which is 2-12 per cent higher than the 1991 level. The volume of housing put into service significantly increased in 2014 and 2015, amounting to 7.5 million m\(^2\) and 8.9 million m\(^2\) of housing per year, respectively (see Figure 8).

The Nurly Zher Programme aims to increase housing provision up to 22 m\(^2\) by 2020. If such levels of housing provision and the predicted population of Kazakhstan by 2031 (i.e., 24 million people) are maintained, the annual volume of housing put into operation between 2016 and 2030 should be at least 12 million m\(^2\). The Nurly Zher Programme aims to put into operation over 10 million m\(^2\) a year between 2017 and 2021 through the use of all sources of finance. In 2016, 10.53 million m\(^2\) of housing was put into operation (17.6 per cent more than in 2015), including 5.2 million m\(^2\) contributed by individual developers.\(^{92}\)

**Figure 8**

**Housing put into operation between 2005 and 2015**


From 2005 to the present day, housing construction is supported through the allocation of a considerable amount of budget funds under public housing programmes, and infrastructure and construction industry development programmes. Since 2005, 7.3 million m$^2$ of housing have been constructed at the expense of government investments, which made it possible to provide housing to more than 105,000 citizens$^{93}$. The share of government agencies in housing construction decreased from 25.9 per cent (in 2005) to between 12.6 and 18.4 per cent in the subsequent period. In 2015, government developers accounted for 16.2 per cent of the total floor area of housing put into operation.

In addition to direct financing of housing construction, budget funds are used to promote private investments in housing construction. Between 2005 and 2015, out of 74.15 million m$^2$ of housing put into operation, 62.23 million m$^2$ (83.9 per cent of the total housing volume) were constructed at the expense of private financing. Individual developers accounted for the largest share of private investment; 38.31 million m$^2$ of housing were put into operation at their expense in this period (51.67 per cent of total housing put into operation).

The share of housing constructed by individual developers in various years ranged from 46.4 per cent to 58.9 per cent of housing put into operation. In 2015, individual developers accounted for 49.2 per cent of the total volume of housing put into operation; in 2016, it was 49.5 per cent. It is noteworthy that individual housing construction in rural areas was noticeably behind such construction in urban areas up until 2013 (see Figure 8), which indicates poorer housing availability for rural residents. In 2015, the volumes of individual housing construction in urban and rural areas became almost equal (2.28 and 2.12 million m$^2$, respectively).

Picture 3

*Cottage town in Astana, an example of modern manor development*

*Photo by: Alexander Belyi.*

$^{93}$ The Nurly Zher Housing Construction Programme.
D. CONSTRUCTION MATERIALS AND HOUSING CONSTRUCTION TECHNOLOGIES

The first public housing programmes showed that the private construction industry, established in 1970-1980, is able to satisfy only a fraction of the needs of the construction industry and, as a consequence, imported products account for a substantial share of the market. The technologies for manufacturing domestic construction materials are outdated, and production facilities are functionally obsolete. The domestic machine-building industry is underdeveloped, and there are virtually no plants manufacturing load lifting and construction machinery, mechanical handling equipment, technological equipment, sanitary wares, and glass. It was concluded that, to increase housing construction and to shorten the time taken, as well as to reduce the costs of housing, it is necessary to ensure the industrialization of the construction process and to organize the manufacturing of domestic modern and efficient construction materials, products, and components.

In 2010, Kazakhstan approved the Programme of the Development of Construction Industry and Manufacturing of Building Materials in the Republic of Kazakhstan for 2010-2014.\(^\text{94}\) One of its objectives was to meet the needs of the home market through the use of domestic construction materials by more than 80 per cent by 2014. The programme was aimed to include:

- construction of new cement plants and modernization of existing ones;
- construction of plants producing sanitary-technical and facing ceramics and glassworks;
- modernization of existing concrete products plants and construction of new concrete products plants manufacturing a new generation of components for the prefabricated and frame-monolithic construction of multi-family residential buildings with the improved design of flats, matching brick and monolithic buildings in appearance and performance properties.

Financial support for the construction and reconstruction of building industry enterprises has been entrusted to the Joint Stock Company Sovereign Wealth Fund “Samruk-Kazyna” (credit, leasing, equity participation).

The State provides a number of measures to stimulate the domestic manufacturing of construction materials and structures, such as the use of technical specifications of domestic products in model projects, the construction of multi-family and individual houses, and long-term contracts for the supply of manufactured construction products under government programmes. With respect to housing construction under the Nurly Zher Programme for the citizens registered in akimats, and for the depositors of the Housing Construction Savings Bank, priority is given to projects that use products manufactured by domestic plants. Standard projects of individual housing construction will also focus upon the structures manufactured by domestic plants.

Serial 9-storey block sections in Stepnogorsk (Akmola region)

Photo by: Alexander Belyi.
Chapter 6. Energy Efficiency and Energy Saving in Residential Sector

A. ENERGY CONSUMPTION IN RESIDENTIAL SECTOR

The energy sector of the country is the source of 80 per cent of all emissions, 90 per cent of which are in the heat and electric power production sectors. Buildings, primarily in the residential sector, consume about 13.6 per cent of electric power and 40 per cent of heat power. The residential sector is the third largest consumer of heat and electric power in the country, after the energy and manufacturing sectors.

The majority of the housing stock consists of old non-energy-efficient buildings, with the district heat- and energy supply systems constructed in 1950-1985. According to experts, the consumption of heat energy in buildings in Kazakhstan is about 240 kW/m² per annum (in comparison, this indicator in Sweden is 82 kW/m²; in Germany, 120 kW/m²; in France, 126 kW/m²; and in England, 130 kW/m²). In 2010-2013, a mass energy audit of the residential buildings in Kazakhstan was conducted, which demonstrated that apartment buildings have a high consumption of heat energy: for example, in Almaty, the average consumption of heat energy per annum was 136 kWh/m²; in Atyrau, 181 kWh/m²; and in Kokshetau, 257 kWh/m² (according to the JSC “Kazakhstan Centre for Modernization and Development of Housing and Utilities”).

The housing stock consists mostly of multi-apartment buildings. For the production of electric and heat energies in 2015, 43.6 million tonnes of the equivalent fuel\(^{95}\) were used, 72 per cent of which was coal. Natural gas (20 per cent) is used as a primary fuel in the west and south regions of the country.

More than a half of greenhouse gas emissions in the heat- and energy supply sectors in Kazakhstan originate from premises heating (due to climate specificity). In 2015, 60.8 million Gcal\(^{96}\) of heat energy was distributed, including 24.1 million Gcal (39.6 per cent) for population. One fifth of total emissions in the residential sector comes from the consumption of hot water and electricity. The remaining share includes cooking and other types of heat and electric energy consumption. Coal is used for production of 85 per cent of electric energy in the country.

B. POLICY AND MEASURES ON THE PROMOTION OF ENERGY EFFICIENCY IN THE RESIDENTIAL SECTOR

In recent years, improvement of energy efficiency became a national strategic priority. The political will of the country in the promotion of energy efficiency was expressed through the adoption of a number of strategic documents, namely the Strategy of Transition of the Republic of Kazakhstan to a “Green” Economy”, Strategy-2050, and programmes such as Nurly Zhol, 100 Steps of the Nation, Energy Saving-2020, and others.

Energy-efficiency issues are within the competence of different government institutions, particularly, the CCHCS and the Committee on Industrial Development and Industrial Safety of the Ministry for Investments and Development (energy saving and energy efficiency).


The main document on energy efficiency is the Law of the Republic of Kazakhstan No. 541-IV on Energy Saving and Energy Efficiency Improvement of 13 January, 2012. For energy efficiency in buildings, in particular, the Law introduced the term “thermal modernization” for the first time, defined as the activities regarding the improvement of thermal and technical specifications of a building leading to a reduction of heat losses. Furthermore, Article 11 of this Law “ensures an energy efficiency of the buildings, structures, and premises when designing and construction”. The term “building energy-efficiency class” was determined, a designer’s competence was introduced for the development of an “Energy Efficiency” section, for determination of the building energy-efficiency class and for the observance of energy saving requirements and energy-efficiency improvements as imposed by the design (design and estimate) documentation of the buildings. The required energy-efficiency class is specified in a Customer’s Specification for Construction Project Development (reconstruction, capital renovation), and is indicated in the technical data sheet of the constructed and commissioned facilities when registering the real property rights after putting the completely constructed (reconstructed, capital repaired) facility into operation.

Moreover, the Law specifies the responsibilities of the competent authority on the enforcement of the requirements regarding energy saving and energy efficiency in architectural and engineering, and other pre-design and/or design (design and estimate) documentation to be developed and approved for the purposes of reconstruction and construction of buildings. Currently, the “Energy Efficiency” section and the availability of the Energy Data Sheet are checked if there is an expertise of the design documentation. The energy-efficiency class of existing buildings, structures, and premises and its revision is determined in the manner established by the competent authority according to the results of the energy audit, and is specified in the data sheet of the building, structure or premises. The energy audit report is attached to the data sheet of buildings, structures, and premises. Energy-efficiency labeling of existing buildings, structures, and premises is established according to the results of an energy audit, and is specified in the energy audit report.

A possibility, indicated in the Law, to assist and support the owners of residential buildings and residential accommodations (apartments) with the payment of measures aimed at energy saving and improvement of energy efficiency in compliance with the housing legislation is of special importance. Also, this Law requires that the design of multi-apartment buildings should provide the compulsory use of energy-efficient materials, installation of in-house heat and water metering devices, in-apartment electric energy, cold and hot water, gas metering devices, heating system controllers, and automated heat consumption control systems.

In addition, Kazakhstan adopted construction standards, such as SN RK 2.04-04-2011 “Buildings Heat Insulation”, establishing the energy-efficiency requirements regarding the design of new buildings. The UNDP-GEF Project “Energy Efficient Design and Construction of Residential Buildings in Kazakhstan” developed a rating table of building efficiency class (see Annex 2) according to heat consumption in compliance with these regulatory documents when designing new residential buildings in pilot cities.

Furthermore, in compliance with the Law on Energy Saving and Energy Efficiency Improvement, the following Resolutions were adopted, which govern the execution procedure of this Law regarding energy efficiency of buildings:

- Resolution of the President of the Republic of Kazakhstan No. 1181 on Setting the Requirements to Energy Efficiency of Buildings, Structures, Premises and their Elements being a Part of Enclosing Structures of 11 September 2012;
• Resolution of the President of the Republic of Kazakhstan No. 1117 on Adoption of Rules for Determination and Revision of Energy Efficiency Classes of Buildings, Structures, Premises of 31 August 2012; and

• Resolution of the President of the Republic of Kazakhstan No. 1192 on Adoption of Requirements to Energy Saving and Improvement of Energy Efficiency Imposing to Pre-Design and/or Design (Design and Estimate) Documentations of Buildings, Structures, Premises of 13 September 2012.

For the International Exhibition “EXPO-2017 – Future Energy”, there is increased interest in “green” building construction and certification in Kazakhstan, with the aim of complying with environmental assessment standards. National companies (Astana EXPO-2017 JSC, Samruk-Kazyna Fund and BI Group) are working on the development of a design for “green” districts and exhibition pavilions, which are expected to be certified to obtain the estimates according to the “green” construction rating systems.

One of the first steps for the implementation of the energy-efficiency policy in Kazakhstan cities is the development of economic mechanisms to support the installation of heat metering devices and energy products at public facilities, industrial enterprises, and housing sector facilities, and the subsequent practical introduction of the first devices of individual and group fiscal metering.

Since 1 July 2012, a provision of the Law on Energy Saving and Energy Efficiency Improvement was introduced, according to which consumers shall pay for heat energy according to differential tariffs, depending on the availability, or lack of, heat energy measuring devices.97

Thus, the heat supply tariffs in Astana have been set with differentiation, depending on the availability, or lack thereof, of heat energy metering devices in the population:

• if heat metering devices are available, KZT 2,485.45/1 Gcal;
• if heat metering devices are not available, KZT 2,994.91/Gcal; and
• if population living in shabby, failing private premises, and bunk houses where it is impossible to install in-house heat metering devices, KZT 2,495.76/Gcal.98

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97 This regards in-house heat metering devices. Note that consumers in multi-apartment buildings can have individual heat metering devices and pay according to them, according to legislation. However, in practice, it is impossible to do so for different reasons, both technical (rising wiring of the heating system in the building and the impossibility of installing the devices) and economical (high costs for the calibration and maintenance of the devices).

98 As of March 2017, the exchange rate was USD 1 $ = KZT 318
C. POSSIBILITIES FOR THE PROMOTION OF ENERGY SAVING IN THE RESIDENTIAL SECTOR

The current state of energy-efficiency improvement in the residential sector can be assessed as a period of slow creation of an ideology, legal and regulatory provisions, and their slow transfer to practical activity, with the subsequent gradual testing of actual energy-saving technologies.

The following key factors should be mentioned, whose elimination will allow the promotion of the energy-saving process in the residential sector.

Firstly, in case of the existing tariffs for natural monopoly services (such as energy system), a payback period of investments into energy-saving projects on the side of a consumer is too long. The low-paying capacity of most of the consumers, and partial payment for consumed energy (involving energy subsidies99), determine non-attractiveness of the sector for investing in the modernization and technical upgrading of residential buildings and facilities. As a result, the quality of energy supply services is decreasing, energy losses are increasing and infrastructure is becoming further out-of-date.

Secondly, construction standards determining the requirements regarding energy efficiency of residential buildings are not always observed regarding the construction of new buildings in order to decrease construction estimate costs100. Consumers, in turn, are unaware of the real state of a facility to be put into operation due to the non-availability of energy data sheets for the facilities, although the latter is required for the approval of the design and estimate documentation.

99 OECD Report.
Thirdly, even if a facility has been constructed in compliance with all energy-saving norms and regulations, maintaining its operational condition to ensure the energy characteristics as specified by the project is often problematic. There are no mandatory standards in Kazakhstan regarding the maintenance and operation of the housing fund, including those concerning the level of energy efficiency regarding building. In fact, there are no clear regulations on the maintenance of multi-apartment buildings to be strictly observed by the owners. Currently, owners are given complete control over decision-making (renovations, prevention, maintenance of engineering utilities, communications, etc.). As there are no any existing regulations, apartment owners have a right to waive the necessary operating costs, including costs related to the maintenance of equipment regulating the energy consumption level in the building (for example, heating distribution units, equipment for effective lighting, etc.).

Fourthly, content for capacity building (curricula and, as a consequence, qualification of the graduates) in the field of energy saving fails to comply with the competences required to take different decisions related to the operation and maintenance of residential buildings. The personnel working in these fields does not have sufficient qualifications and competences to make effective energy-saving renovations and further operation of the equipment installed.

And lastly, fairly high values of specific energy consumption in the housing stock are also explained by the existing system of housing management. As is known, after the privatization of apartments, multi-apartment buildings are managed by the association of apartment owners (AAO) and other forms of condominiums. These forms of condominiums deal with the maintenance of the heating systems in the residential buildings (heating distribution units), the preparation of the housing stock for winter conditions, etc. The apartment owners pay for these works through specific charges or monthly payments for building maintenance. For consumed heat read from metering devices (where installed), an apartment owner pays directly to the energy supply company. The management and service provider companies are not motivated to monitor the level of energy consumption because of a lack of clear housing maintenance standards and energy-efficiency target values. This relates to both heat and electrical energy for in-house needs (lighting of public places and other general costs).

D. INFORMATION ABOUT THE ACTIVITIES OF DONORS IN THE FIELD OF HOUSING ENERGY EFFICIENCY


These projects contributed, and are contributing, to the conservation of the global environment through reducing greenhouse gas emissions by creating the conditions for the complex thermal modernization of buildings and the testing of various technical and organizational solutions leading to energy saving in residential buildings.
The key achievements of these UNDP projects and initiatives for this period are:

- the successful involvement in the adoption of the Law on Energy Saving and Energy Efficiency Improvement, approved in January 2012 and amended at the end of 2014. The Law includes such terms as “thermal modernization of buildings”, “energy-efficiency class”, “energy service company” which promote energy efficiency in such a socially important sector as the housing one;

- the demonstration of the sustainable practices of energy-efficiency improvement in residential buildings with an annual effect of reducing the costs for energy by up to 40 per cent, and a reduction of greenhouse gas emissions of up to 180 tonnes per modernized building;

- the demonstration of essential social and economic benefits for Kazakhstan from energy saving in the form of the creation of new jobs, and an increase in access to sustainable energy. It is estimated that the thermal modernization of one multi-storied building creates, on average, 1 to 2 permanent “green jobs” annually;

- the demonstration that the use of new energy-efficient technologies when constructing residential buildings, while raising building costs by 10 per cent, allow for energy efficiency of 35-40 per cent. A building constructed in this way will comply with a high energy-efficiency class (class B); and

- introduction of amendments to the existing normative technical documents with the attribution of the energy efficiency class to the comfort class of the building, in particular Rules of the Republic of Kazakhstan, 3.02-101-2012 “Residential apartment blocks”;

- based on approved solutions with the involvement of the UNDP, the regulatory and technical documents for the design of energy-efficient residential buildings in Kazakhstan were developed and took effect from 1 July 2015, and the existing building construction standards which govern energy efficiency according to a comfort class of buildings to be constructed were amended.

Examples of different pilot projects aimed at energy-efficiency improvement in residential buildings implemented by UNDP-GEF are given below.
Example 1. Implementation of smart technologies in heating and energy management: residential building in Aktau

The project, which was focused on the implementation of smart technologies and innovations in the energy management of residential homes, aims to solve heat consumption issues in the central heating system.

The control and automatic regulation of temperature and circulation of heat depends on the outside air temperature. Energy management at home will help the management company to introduce and ensure rational consumption of energy and water.

Main Outcomes

- Reduction of estimated heat consumption and savings during the heating season
- 15% savings

Estimated savings when implementing energy management project in condominiums

Example 2. Energy Efficiency: association of apartment owners “Maksat”

Project process

- selection of a facility
- signing reciprocal contract with owners
- project design and cost estimation
- equipment supply and installation contract execution
- grant from UNDP/GEF
- preparation of grant application
- supply, installation, putting equipment into operation
- energy-efficiency revolving fund structures
- implementation of additional energy efficiency measures for heat saving

Outcomes

- 3 326 156 KZT costcutting transferred to energy-efficiency revolving fund
- 219.4 tons greenhouse gas emission reduction
- 27% (417 GCal) reduction in heat energy usage
- improved heating supply quality
Example 3. Modernization of heat consumption system using ESCO (energy service contract) mechanism: Karaganda

In 2010-2013, a German-Kazakhstan Project “Development and Implementation of Qualification Improvement Course – Management of Building Energy-Saving Rehabilitation” was implemented in Kazakhstan. This project was supported by the Federal Ministry for Economic Cooperation and Development of Germany; the private businesses Viessmann Industrial Group, Profine, Lacufa; and a non-profit organization from Berlin “Initiative Wohnungswirtschaft Osteuropa”.

Within the project implementation, workshops and events were conducted in five regions of Kazakhstan, which focused on buildings’ energy-saving rehabilitation, and familiarization with the European practice of housing renovation. Within the project implementation, a training course “Management of Buildings’ Energy-Saving Rehabilitation” was developed with the support of international and local experts.

In 2012, as part of the activities of the Task Force on the Implementation of the Environmental Action Programme (EAP Task Force) for Eastern Europe, Caucasus and Central Asia, the Project “Improvement of the Energy Efficiency of the Residential Sector in Kazakhstan: a pilot design of the public investment program” was implemented. The similarly-named published report summarizes the results of a pilot project implemented to support the activities of the
Ministry of Environmental Protection on the identification, development and cost estimation of the long-term programme of budgetary investments in a key area related to the climate change – energy efficiency of the residential sector. The residential sector was designated as a priority; the main phases, criteria and tools for the development of the budgetary investment programme were to be demonstrated. The developed programme provides three project portfolios:

- the thermal insulation (thermal renovation or modernization) of residential buildings, particularly of typical bearing-wall residential buildings;
- the assembling of automatic building level substations (BLS) and the installation of thermostatic regulators on the radiators to improve heat-energy distribution according to needs, and increase the thermal comfort in the living space; and
- the transfer from coal to natural gas when producing energy for heating in the residential sector (i.e. local boiler stations supplying heat to multi-apartment buildings).

The proposed design of the public investment programme on energy-efficiency improvement in the residential sector of Kazakhstan has not yet been put into practice.

Conclusions on Housing Sector

Housing Policy and Housing Construction

The Republic of Kazakhstan is a country with a steadily growing population. Since 2011, the population has been annually increasing by 1.40-1.45%. As of 1 January 2017, the total population was 17,918.2 thousand people, of which 57.21% lived in urban settlements. According to forecasts, the population of Kazakhstan will reach 24 million people by 2031.

The population is unevenly distributed across the country. With an average population density of 6.6 people per 1 square kilometre, the most densely populated South-Kazakhstan region has 24.5 persons/km², the capital city of Astana has 1,389.6 persons/km², and the largest city of Almaty has 2,501.9 persons/km².

The further territorial development is planned as the development of urban agglomerations with hub cities of Astana, Almaty, Shymkent, Aktobe, and, in the longer term, Ust-Kamenogorsk. Even now, the emerging urban agglomerations are home to a third of the population. In rural areas, there are plans to develop hub human settlements, whose industrial and social infrastructure will be used by citizens living in adjacent areas.

As of 1 January 2017, the total floor area of the housing stock was at 342.6 million m², 76.2% of which were urban housing stock. From 2005 to 2016, the housing stock of the country increased by 34.56%, at the same time since 2009 the growth rate of the urban housing stock has been 2-3.5 times higher than that of the rural one. Out of 5,115,260 homes that Kazakhstan has, 66.4% are located in urban settlements and only 33.56% are in rural areas.

Given the general increase in housing provision between 2005 and 2016 (from 17.5 m² per person to 21.4 m²), the housing provision with regard to the urban population is higher than that in rural areas – 24.0 m²/person, and 18.0 m²/person, respectively.

Despite fairly good average statistical indicators of housing provision (21.4 m² of housing per person, and 1 home per household), there is still a significant demand for housing resulting from population growth, migration and urbanization. About 14% of the population (about 2.5 million people) are in need of housing. These figures take into account only citizens registered with local executive authorities as those in need of housing and entitled to housing from the municipal (state) housing stock (400 thousand people), participants of the housing construction
savings system (who have deposits in the Housing Construction Savings Bank – 780 thousand people), and citizens placed on the waiting lists to be allocated land parcels for individual housing construction (1.3 million people).

To meet the current housing demand, as well as taking into account the projected population growth, by 2031 it is necessary to increase the floor area of the housing stock by at least 54% as compared to the existing stock (even without any increase in the housing provision indicator of over 22 m² per person, which is targeted for 2020). In this regard, Kazakhstan faces an ambitious housing construction challenge: between 2016 and 2030, the country should annually put into commission an average of at least 12 million m² of housing.

Creating favourable environment for housing provision is a priority of the national housing policies in the Republic of Kazakhstan. Since 2005, the Government has adopted seven government housing construction programs. Government programmes provide framework for the development of various housing construction mechanisms. While the initial programmes were aimed at satisfying housing needs on the market, the recent government housing construction programme “Nurly Zher”, approved in December 2016, aims to ensure housing provision for people with different incomes. The programme was designed for a five-year period (2017-2021) and it is supposed to provide housing for 1.5 million citizens. Housing provision is planned to be improved through the following mechanisms:

- **construction of rental housing for socially vulnerable categories of population** – housing construction by local authorities at the cost of targeted transfers from the Republican budget to be leased (with no purchase option) to citizens placed on waiting lists and entitled to housing provision from the communal housing stock;

- **support of individual housing construction** through provision of citizens with land parcels equipped with communal infrastructure, development and free distribution of model projects for the construction of individual houses from local materials and structures (predominantly industrially manufactured), as well as pilot projects of individual housing construction by a single public customer in a unified architectural style with their subsequent sale to citizens placed on waiting lists for land parcels for individual housing construction;

- **construction of affordable housing for participants of housing construction savings system** – construction of apartments with limited floor area and price to be acquired by citizens for their deposits kept in the Housing Construction Savings Bank and preferential housing loans granted by the Bank;

- **encouraging construction of affordable housing by private developers** through the provision of soft loans for the construction of housing with limited floor area and fixed price;

- **increasing the availability of mortgage loans** by providing banks with subsidies to reduce their interest rates on mortgage loans;

- **support of shared-equity housing construction** by providing citizens with guarantees with respect to the obligations of private developers through the Housing Construction Guarantee Fund.

Under the Nurly Zher programme it is planned to put into operation 62.41 million m² of housing due to all sources of financing (taking into account the commissioning of 2016 planned under the Regional Development Programme 2020). In 2016 10.53 million m² of housing were put into operation (17.6% more than in 2015), of which 5.2 million m² were commissioned by individual developers.
Successful implementation of the Nurly Zher programme will significantly advance the solution of the problem of providing the population with housing. But after it is completed, it is necessary that the worked out mechanisms continue to operate.

Due to the data on necessary housing construction, taking into account the goal of achieving housing provision in 2020 of 22 m², it is necessary to increase the annual construction from the planned 10.4 million m² to about 12 million m².

Based on the number of registered people in need of housing (2.5 million people), the implementation of the programme will not completely solve the problem of providing housing as it provides for the construction of housing for 1.5 million people. It is also necessary to take into account that the number of people in need will increase during the implementation period of the programme. In addition, there is an unaccounted need for housing for those households that do not belong to socially vulnerable categories with the right to housing in the communal fund and are not investors of HCSB, as their incomes do not allow them to make savings and buy housing on mortgages.

Thus, upon the completion of the Nurly Zher programme, the government needs to support the established mechanisms through the introduction of new programs that must take into account, among other things, housing security indicators or housing space standards for provision.

The government presence in the housing construction sector is very significant. In addition to local executive authorities (akimats of regions, districts, cities of Astana and Almaty), national development institutions and companies with state participation also take part in the implementation of the government housing programmes. Substantial budgetary funds are allocated for addressing housing provision challenges.

It should be noted that all housing construction mechanisms within the framework of government programmes are aimed at the acquisition of home ownership by citizens. Meanwhile, as a result of privatization of the public housing stock, Kazakhstan, as well as other former socialistic countries, lost virtually its entire rental housing sector. Although the construction of rental housing was announced as one of the promising areas of housing construction, rental housing constructed under government programmes is provided to citizens placed on the waiting lists with local executive authorities with an option to purchase such apartments within 15 to 20-year period (with the exception of apartments from communal housing stock provided to socially vulnerable categories of citizens). Thus, rental housing remains rental only for a certain period of time, until it is redeemed at the expense of the rental payments, after redemption the housing is no longer rental and it becomes privately owned by citizens. In the longer term, it can be expected that there will re-emerge issues with management, maintenance and repair of multi-apartment rental houses, which, following the buy-out of apartments, will become condominium objects; these issues will be similar to those of apartment houses with privatized apartments.

Few houses constructed within the framework of communal housing stock projects are targeted exclusively at socially vulnerable groups of citizens placed on social housing waiting lists with local executive authorities. In Astana and Almaty, to be placed on such lists, citizens eligible for social housing are required to permanently reside in these cities for at least three years. A large proportion of low-income households, which do not belong to socially vulnerable groups and whose incomes make it impossible for them to build up savings at the accounts of the Housing Construction Savings Bank, cannot afford to satisfy their housing needs. The demand for affordable rental housing of middle-income households is neither satisfied. The demand for affordable rental housing is especially significant in developing urban agglomerations, which are the destination of internal migrant flows. Currently, it is satisfied only by the provision of rental housing owned by citizens at a semi-legalized market of commercial rental housing.
Transition economies are only beginning to discuss the question of establishing non-profit rental housing sector. The Russian Federation adopted legislation on social rental housing and commercial rental housing in 2014. However, there are very few examples of social rental housing construction as municipalities lack financial support from the government. This fact confirms that establishment of the sector of affordable rental housing, which can be rented by citizens with different incomes for different periods, requires government support.

Kazakhstan has an extensive experience of providing government support to housing construction, it has good capacity to develop a specialized programme aimed at establishment of affordable rental housing sector to meet the housing needs of citizens who are not entitled to social housing and cannot or do not want to acquire housing in their ownership.

The housing stock in Kazakhstan has a fairly high level of development. Water is provided to more than 99% of multi-family and individual buildings in urban settlements and to more than 96% of the buildings in rural human settlements. 89.7% and 80.8% of apartment houses in urban areas are supplied with central heating and hot water, respectively. High level of gasification (more than 95%) of individual houses in both urban and rural settlements, as well as that of apartment houses in rural areas makes it possible to ensure heating and hot water supply from individual installations.

The objectives of ensuring citizens’ access to clean water and other utility services, as well as reducing significant degradation of utility networks have always been addressed through several government programmes aimed at development and modernization of municipal infrastructure. The Republican budget allocates substantial funds for the implementation of infrastructural projects; funds are also raised from international financial organizations.

Following the reorganization of the Republican state executive authorities in 2017, the responsibility for the implementation of the Nurly Zher housing programme and infrastructural development programmes is shared by the Ministry for Investments and Development of the Republic of Kazakhstan and the MoNE. This requires good coordination between the ministries, government development institutions and local executive authorities involved in the implementation of government programmes. At the same time, challenges of housing and utility sectors are a priority for neither of the ministries.

Management, Maintenance and Repair of Multi-Apartment Housing Stock

As of 1 January 2017, multi-apartment buildings made up only 14.14% of the total number of residential buildings in Kazakhstan, but apartments in multi-apartment buildings made up 51.43% of the total floor area of the country’s housing stock. About 97% of the housing stock were in private ownership. So, almost every apartment building in Kazakhstan (except those constructed within the framework of the government programme of rental housing) is an object, in which apartments and non-residential premises are in individual ownership of citizens and other persons, while shared property (common areas, supporting structures, engineering systems, etc.) belongs to all homeowners as a right of common shared ownership. The legislation of the Republic of Kazakhstan defines such type of ownership as “condominium.” The relations in multi-apartment buildings/condominiums are governed by the law of the Republic of Kazakhstan “On Housing Relations” (1997). The main provisions of the law “On Housing Relations” with regard to management and maintenance of multi-apartment houses are similar to the legislation of other transition economies, which saw the privatization of their public housing stock, and stipulate that a general meeting of homeowners shall make decisions on management, maintenance and repair of common property in multi-apartment buildings, and
also that homeowners in a multi-apartment building shall be entitled to create a legal entity – a cooperative of apartment (home) owners (traditionally abbreviated as CHO) to manage a multi-apartment building or to choose another method of management.

Kazakhstan is facing serious challenges regarding management of multi-apartment buildings/condominiums. They relate, first of all, to the fact that homeowners are not sufficiently active in managing their shared property because of lack of awareness and overcomplicated rules for making decisions at general meetings. Second of all, they are related to the predominance of multi-house CHOs in the management of apartment buildings; such CHOs were established during the privatization process upon the initiative of local executive authorities rather than new homeowners to replace public housing and maintenance organizations. Homeowners in such CHOs are practically not involved in the process of making decisions on management of their shared property. Such CHOs seem to be managing and servicing organizations rolled into one rather than associations of apartment owners, representing their interests. Multi-house CHOs do not contribute to the formation of the market of professional services to ensure management and maintenance of apartment buildings, nor do they provide professional level of management services for apartment houses and their adequate maintenance.

Other countries have similar challenges. For instance, Uzbekistan had similar challenges with managing apartment buildings by multi-house associations of homeowners. They were overcome in many respects through the awareness-raising of apartment owners, maximum simplification of procedures for exiting such associations and establishing single-house associations, as well as through economic preferences provided to the newly created private managing and servicing companies.

In Kazakhstan, the government efforts to improve the management and maintenance of apartment buildings were mostly aimed at reinforcing the legislative requirements for the CHOs’ activities (obligation to open a separate bank account for each multi-apartment building managed by a CHO, prohibition to provide maintenance services for apartment buildings using their own resources, and obligation to enter into contracts with service companies), and conferring special powers to housing inspections under local executive authorities. The requirements of the legislation are not fully implemented in practice, in particular because of the lack of an adequate environment for their implementation. There is no system for training professional managers, there is no market for maintenance of apartment buildings (the fact that CHOs cannot afford to pay for the services of private servicing companies makes this area unattractive for new businesses).

For most CHOs, the small amount of contributions from apartment owners on maintenance of shared property makes it impossible to ensure all necessary maintenance and repair works in apartment houses. This entails accelerated degradation of multi-apartment housing stock, and increased need for its refurbishment. About a third of the multi-apartment housing stock is in need of urgent refurbishment, as well as improving its energy efficiency.

Amendments made to the law “On Housing Relations” in 2011 call on homeowners in multi-apartment buildings to build up savings for the refurbishment by making special contributions. This legislative requirement is not fully implemented because it is necessary to make a relative decision at a general meeting, as well as because of an excessively high amount of contributions established by the law. Contributions for refurbishment are paid mainly in apartment buildings, which are refurbished under government programmes.

Under government programmes, apartment buildings are refurbished at the cost of targeted budgetary funds, which are subsequently reimbursed by homeowners through the payment of
contributions for refurbishment during 8 to 15-year period. Thus, the scope of refurbishment of apartment buildings is limited by budgetary funds. Refurbishment works are carried out by authorized organizations (general contractors) specially established by local executive authorities, which makes it impossible to take advantage of market-based competition during refurbishment.

The Kazakhstan’s mechanism of funding and refurbishment of multi-apartment buildings is not consistent with the best international practices of providing budgetary funds for refurbishment and improving energy efficiency as subsidies to support initiatives of homeowners’ associations, as well as of creating environment for them to attract loans for refurbishment and modernization of apartment buildings.

According to official statistics, dilapidated housing stock makes up only 0.5% of the total floor area of the housing stock. Most dilapidated residential buildings are located in urban settlements, in particular in Almaty. The mechanism for the liquidation of dilapidated housing and relocation of citizens is currently going through the development stage in the context of a pilot project in the city of Astana. Dilapidated housing is demolished and new buildings are constructed by an authorized public organization at the cost of earmarked budgetary funds. Citizens relocated from dilapidated buildings are provided with homes of equivalent floor areas.

Kazakhstan also has a system of granting budget subsidies to low-income households (housing assistance) to pay for housing costs and utilities.
A. ANALYSIS OF TRENDS IN THE HOUSING MARKET AS WELL AS THE ACTORS IN THE HOUSING MARKET

After gaining independence in 1991, the housing policy of the State has undergone major changes. A privatization process ended with the public allocation of housing stock, for both the business and residential sectors, after which a new role for the Government was defined. According to Presidential Decree No. 1344 of 6 September 1993 on a New Housing Policy, the first State programme to reform the housing sector and its finance systems was developed, which foresaw decreasing the role of the Government in the housing sector to indirect management through a system of financial and economic instruments and the creation of the basic institutions of a housing market and their legislative regulation. The focus of this new approach was on the provision of support to people for the purchase of homes through mortgage lending.

At the end of 1999, the National Bank of the Republic of Kazakhstan (NBRK) initiated the development of a regulatory framework for mortgage lending. As a result, the “Concept on long-term financing of housing construction and development of mortgage lending system in the Republic of Kazakhstan” was approved.\(^{101}\)

Law No. 2723 of 23 December 1995 on Mortgage of Immovable Property introduced mortgage lending in Kazakhstan. However, the lending conditions were characterized by high interest rates and down-payment requirements, as well as short loan terms. Therefore, mortgage lending at that time was not a popular tool for the people in solving their housing problems. On 7 December 2000, Law No. 110 on Housing Construction Savings was adopted to regulate the system of contractual savings for housing construction. In the same period, the JSC KMC was founded. Its main activity was to refinance the banks according to the KMC standards (see Part I, Chapter 5 for more detailed discussion on KMC).

The participation of KMC in the mortgage market has improved lending conditions – reduced down-payment; longer loan terms; and lower interest rates. For example, in 2001, mortgage interest rates in commercial banks were between 20 per cent and 24 per cent per annum, loan term was only five years, and mortgages were issued mainly in foreign currency. By 2003, it became possible to take out a loan at an annual interest rate of 12.6 per cent for a term of up to 20 years in the national currency. However, the granting of mortgages took place only in the main cities, such as Astana, Almaty and Atrau. The purchase of housing through mortgage lending was still not affordable to the majority of households, both in the terms of the lending conditions and the value of the real estate. One of the reasons for such a situation was the housing deficit caused by low levels of housing construction in the 1990s.

To address this problem, the Government developed the State Programme of Development of Housing Construction in the Republic of Kazakhstan for 2005-2007. The main purpose of this Programme was the construction of affordable houses for certain categories of people, and their subsequent sale under preferential mortgage terms. During its implementation phase, there was a high level of activity in the construction sector.\(^{102}\) Average house prices in 2007 doubled

\(^{101}\) Approved by Government Decree No. 1290 of 21 August 2000.

\(^{102}\) In particular, in 2005, the rate of commissioning of new housing was 93 per cent more than the level in 2004. In 2006, the rate increased by 25 per cent, and in 2007, the rate was 7 per cent more compared to the previous year.
from the 2005 level (from KZT 76,645 to KZT 148,750). One of the reasons for this rise was the significant “deferred demand” (lack of housing and finance), which was formed during the 1990s, when the annual volume of housing construction did not exceed 1.5 square metres per capita, as well as a significant increase in household incomes (for the period 2001-2007, it was 229 per cent).

The global financial crisis of 2008, triggered by a crisis in the subprime mortgage market in the United States, had a serious impact on the housing market of Kazakhstan. Citizens who invested in housing construction projects (co-investors) were greatly affected, due to the freeze in the construction of a large number of residential projects. At the beginning of the crisis, 62,889 co-investors were registered in the country, who were victims of the crisis. In order to help them, the Government invested about KZT 464.3 billion (representing 2.3 per cent of GDP in 2009) to facilitate the completion of 450 residential projects.

Along with this, in November 2008, the “Plan of priority measures to ensure stability of social and economic development of the Republic of Kazakhstan in the period 2007-2008” was adopted. According to this Plan, KZT 122 billion were allocated, with the goal of stabilizing the housing construction market (financing of “frozen” construction projects). In the case of mortgage lending, KZT 20 billion was allocated, including KZT 8.5 billion for the replenishment of authorized capital, and KZT 12 billion as a concessional budget loan (rate 0.1 per cent for 20 years) for the refinancing/purchase of mortgages from banks.

During the pre-crisis period, the country’s financial institutions had free access to foreign capital markets. Mortgages in foreign currency were available in almost all banks, and enjoyed popularity among borrowers due to more liberal conditions (mortgage loans in foreign currency amounted to about 50 per cent of the mortgage portfolio of the banking system)\(^{103}\). The devaluation of the national currency in 2009, and the simultaneous decrease in incomes\(^ {104}\), has caused the real value of borrowers’ payments on such loans to increase sharply. This has, in turn, resulted in massive default on foreign currency mortgages. In order to prevent further deterioration of the situation, the Government launched a mechanism for refinancing foreign currency mortgage loans\(^ {105}\). The volume of financing of this programme was KZT 600 billion.

Beginning in 2011, the housing construction market slowly recovered. In 2011-2014, there was a gradual increase in the volume of housing construction, both industrial and individual, with average annual growth rates of 4 and 6 per cent, respectively. The average annual rate of growth in the value of real estate was about 15 per cent.

At the end of 2014, due to the decrease in the value of exported energy goods, Kazakhstan faced another financial crisis, which was worse than the previous one of 2007-2008. A more serious devaluation of the national currency took place, and the average daily value of the KZT in 2015 decreased by 25 per cent compared to the previous year.

The real estate market reacted with a significant reduction in demand and an almost complete stoppage of transactions. In the face of economic uncertainty, market participants took a wait-and-see attitude. The dollar equivalent price of real estate decreased twofold, while the price in the national currency “froze”. According to experts, demand for cheap economical housing now became preferable. Developers who let out large apartments are having difficulty renting them out. In some cases, they are forced to divide large apartments, which have already been

\(^{103}\) Republic of Kazakhstan. National Bank.

\(^{104}\) The average daily rate of the KZT against the USD decreased by 23 per cent, and the nominal income of the population decreased by 11 per cent in the period 2008-2009.

\(^{105}\) Government Resolution No. 179 on Certain Issues of Refinancing of Mortgage Loans by Second-Tier Banks of 17 February 2009.
distributed, into smaller units. Transactions in luxury real estate are extremely rare, and occur only if the seller provides a significant discount.

According to the Committee on Statistics of the Republic of Kazakhstan, the value of real estate in the secondary and primary markets in 2016 amounted to KZT 188,600 and KZT 247,400 per m², respectively. Compared to 2015, the price of real estate in the secondary market increased by 7 per cent, which is more than two times lower than the inflation rate\textsuperscript{106}. The price in the primary market, on the other hand, showed a slight decrease (less than 3 per cent) from its 2015 level. In the main cities of the country – Astana, Almaty, Atrau, and Aktau - real estate prices are much higher. The cost of new housing varies between KZT 300,000 and 340,000, which is 30 per cent higher than the national average. In the secondary market, the cost of housing in these cities is in the range of KZT 262,000 and 340,000, which is almost 65 per cent higher than the cost of such housing in the rest of the country.

During 2017 there were no significant fluctuations in the real estate market. At the end of the year, there was a slight decrease in the value of real estate. In particular, the price for new buildings fell to 1.5 per cent, for secondary housing – 2.2 per cent.

At the beginning of 2018, real estate prices remained virtually unchanged and remained at the level of the previous year. According to the majority opinion, in the absence of any significant events that could significantly affect the economic situation in the country, the value of real estate this year will not change significantly.

The rental housing sector is well developed, but mainly in the main cities of the country where the need for such type of housing is high. Commercial rental housing stock consists mainly of small apartments that were inherited by citizens, or were acquired for subsequent leasing.

Information on the cost of residential rental housing is collected at the state level. According to the Committee on Statistics, in 2016, the cost of rental housing amounted to KZT 1,300 per m², virtually unchanged from the previous year. In Astana and Almaty, this indicator was fixed at KZT 2,300-2,400 per m².

\textit{Market Participants}

The key participants of the housing market are the real estate developers. According to the Committee on Statistics, in 2016-2017, the number of developers stably varies between 7-7,5 thousand, and around 30 per cent of them operated in the cities of Astana and Almaty.

In October 2016, a new version of the Law on Equity Participation in Housing Construction came into force\textsuperscript{107}. This new Law introduces new provisions aimed at protecting the rights of participants of equity construction. In particular, the conditions under which developers could attract funds from co-investors are clearly regulated. In the previous version of the Law, developers could raise funds from co-investors through transactions that were not subject to legislative regulation. The new Law clearly regulates the conditions for, and methods of, organizing equity housing construction, defines the requirements for developers (Table 3), and introduces the option of liability insurance for developers.

\textsuperscript{106} According to the Committee on Statistics, the inflation rate in 2016 in relation to the previous year was 14.6 per cent.

\textsuperscript{107} Law No. 486-V ZRK of April 2016. This Law entered into force on 10 October 2016 and repealed the previous version (Law No. 180 of 7 July 2006).
Table 3
Requirements for developers, by method of organizing equity housing construction

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<thead>
<tr>
<th>Method 1</th>
<th>Method 2</th>
<th>Method 3</th>
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<tbody>
<tr>
<td>Guaranteeing the shareholders’ contributions</td>
<td>Financing of projects by second-tier banks</td>
<td>Construction of a residential building’s frame at the expense of a developer’s own funds</td>
</tr>
</tbody>
</table>

- At least 3 years of experience in constructing residential buildings;
- No performance loss in the last 2 years;
- Borrowed capital does not exceed own capital by more than 7 times during the whole construction period before the facility becomes operational.

- At least 3 years of experience in constructing residential buildings of at least 18,000 m² total area in cities of national significance or in the capital, and at least 9,000 m² in other administrative-territorial units;
- Availability of a land plot in the form of property or rent;
- Availability of design estimate documentation (PED) with a positive conclusion of the state examination.

- Availability of the constructed frame of the residential building at the expense of the developer; at least 5 years of experience in constructing residential buildings of at least 60,000 m² total area in cities of national significance or in the capital; and at least 30,000 m² in other administrative-territorial units;
- Availability of the land plot in the form of property or rent;
- Availability of PED with a positive conclusion of the state examination.

Under this new Law, the Housing Guarantee Fund (HGF) was established based on the existing Kazakhstan Mortgage Guarantee Fund.

According to the Charter, the fund carries out activities in two areas:

1. Guarantee of mortgage loans (servicing of previously issued obligations for mortgage housing loans). Under this option, the fund undertakes to reimburse the lender for part or all the losses incurred as a result of default of the borrower in the event that the amount from the sale of collateral is insufficient to cover the borrower’s obligations. The maximum coverage was determined in accordance with a specific mortgage program for five models of guarantee. In this case, payment of 100 per cent of the amount of net losses of the creditor was provided only in the framework of state programs. In total, 36 thousand families took advantage of this guarantee scheme, of which 33,500 families were participants in various state programs. At the end of 2016, there were 14,184 guarantee obligations in the amount of KZT 46.5 billion, and the total number of guaranteed mortgage loans overdue for fulfilling obligations within 1-2 per cent of the total guaranteed mortgages portfolio. Due to the lack of additional capitalization, this type of activity was suspended.

2. Guarantee of housing construction. According to this direction, the Fund provides guarantees for the completion of the construction of a residential building. The Fund has the authority
to request qualification requirements for participants of equity construction on financial sustainability experience, and to apply control mechanisms over the targeted use of co-investors’ money by engaging independent engineering companies, and to use best practices of risk management. In addition, the HGF will form a special reserve guarantee fund from the contributions of developers for the exclusive purpose of covering costs associated with the settlement of warranty claims. The amount of the guarantee contribution to the reserve fund is equivalent to 2 to 6 per cent of the project cost. In the case of an event covered by the warranty, the HGF has an obligation to complete the unfinished construction project. Warranty cases include the following: violation of the deadline for the completion of a residential building; non-targeted use of funds by the developer; and insolvency of the developer, established legally by a court decision.

According to the Development Strategy of the JSC “Fund for the Guarantee of Housing Construction for 2016-2023 years” in 2023, it is planned to issue guarantee obligations for KZT 279.3 billion, while the area of housing provided with a state guarantee should amount to 940.6 thousand m².

At the end of 2016, the Fund considered and preliminarily approved the application, according to which the BASIS-A corporation planned to implement the project for the construction of the facility in the amount of KZT 2.5 billion.

Market participants note that strict requirements established under the new Law on equity construction will help to withdraw smaller players from the market and, consequently, monopolize the housing construction market.

Along with developers, realtors and appraisal companies are other significant stakeholders in the real estate sector. However, not all market participants are regulated by legislation. Currently, there is no law regulating the activities of realtors. A non-profit association of professional real estate agencies, the “United Association of Realtors of Kazakhstan”, operates in the country.\footnote{It was formed through the merger of the Association of Realtors of Kazakhstan and the National Association of Realtors in 2009.} This organization has its own standards of practice of realtor activities, which provide for the attestation and issuing of certificates for the provision of real estate services. Currently, a draft law on realtors’ activities is being developed, which will protect the interests of participants of real estate transactions, and promote the full legalization of the realtor services market.

Law No. 109 of 30 November 2000 on Appraisal Activities in the Republic of Kazakhstan sets out the regulations in the implementation of real estate appraisal. The self-regulating organization, the “Chamber of Professional Appraisers of Kazakhstan”\footnote{It was established under the basis of the Kazakhstan association of appraisers.}, operates in the country.

B. MORTGAGE MARKET

Although mortgages were introduced in 1995, the mortgage market only began to function from 2001, when the first mortgage loan was issued. From 1995-2000, the Government, together with the NBRK, have carried out work on the formation of the legislative base and the necessary infrastructure for mortgage lending. Unlike most ex-Soviet countries, the development of the mortgage lending system in Kazakhstan took place without the participation of international donors.

It is worth noting that two housing finance schemes operate in the country – the issuance of mortgage-backed securities secured by rights requirements for mortgages (the American two-
tier model) and the system of housing construction savings (European model). An example of a state refinancing organization operating under the American model is the state JSC KMC. KMC became a pioneer organization in Kazakhstan when it launched a securitization process - the issuance of mortgage-backed securities under the pledge of mortgage claims. KMC also was the primary implementing institution of public housing programmes, in particular the “State programme of housing construction development in the Republic of Kazakhstan for 2005-2007”\textsuperscript{110}. Under this programme, the State’s lending standard of “10/10/20” was established (interest rate - 10 per cent, down-payment - 10 per cent, mortgage term - up to 20 years). Young families, employees of the public sector and civil servants have priority to participate in this programme.

The early stage of mortgage market development (early 2000s) was characterized by strict mortgage conditions: the size of the down-payment was almost 50 per cent, interest rates in the national currency were up to 20 per cent, and loan terms did not exceed 10 years. The appearance of KMC products on the mortgage market contributed to the softening of mortgage requirements and increased competition between commercial banks. Interest rates for mortgages in the national currency fell to 12-15 per cent per annum, the initial down-payment was reduced to 15-20 per cent of the value of the property, and the loan period was increased to 15 years. In addition, the banks actively offered mortgages in foreign currency and adjustable mortgage rates (floating rates). As a consequence, the mortgage market grew at a fast pace. While, in 2003, the mortgage-to-GDP ratio was 1.7 per cent, it reached 5.3 per cent in 2007.

Like many other countries, the global financial crisis had a profound effect on the mortgage market in Kazakhstan, which forced the Government to intervene. In order to prevent massive defaults on foreign currency mortgage borrowings, the Government launched a refinancing programme of such mortgages through second-tier banks (STBs). Loans in the national currency are issued with a less than 9 per cent interest rate for special categories of the population, and a less than 11 per cent rate for all other categories, for a term of up to 20 years. The condition for participation is that the borrower be the owner of a single apartment of up to 120 square metres.

As a result of the Government measures, the market gradually stabilized in the period 2010-2014. Banks started to participate again in the mortgage market, and an increase in mortgage loans issued was seen. In particular, the volume of mortgage loans increased almost three-fold - from KZT 85.1 billion in 2010 to KZT 248.5 billion in 2014. However, a new economic crisis in late 2014 caused a new round of devaluation of the national currency, which contributed to the sharp decline in the volume of mortgage lending and financing of housing construction.

Many banks in 2016 declared that they restarted issuing mortgages, but the terms became significantly stricter: according to a website portal\textsuperscript{111}, the mortgage market is controlled by five major banks. At the end of 2015, mortgages issued by these banks reached almost 100 per cent of the total mortgage portfolio of banks (Figure 9). The three largest mortgage market participants were the JSC Housing Construction Savings Bank of Kazakhstan (HCSB) (31 per cent), the People’s Bank (22 per cent) and Bank Center Credit (19 per cent).

Strengthening the position of the biggest players took place against a background of stagnation of the mortgage market itself. Indeed, the volume of mortgages issued in 2016 amounted to KZT 195.1 billion, the lowest in the last four years.

\textsuperscript{110} It was approved by Decree of the President of the Republic of Kazakhstan No. 1388 of 11 June 2004.

\textsuperscript{111} Monitoring of the economy of Kazakhstan. Available from \url{http://ranking.kz}
Two players maintain the current size of the mortgage market – HCSB and the People’s Bank, which collectively increased their mortgage portfolios by KZT 134.5 billion in 2015. HCSB’s mortgage portfolio has been growing constantly since 2009 (an average growth rate of 33 per cent per year). As at 1 March 2016, the share of HCSB in the total mortgage portfolio of the banking system was about 33 per cent (28 per cent in 2014).\textsuperscript{112}

Founded in 2003, HCSB has a special place in the system of housing finance of the country, being the only bank that implements the system of housing construction savings. It adopted the German system of contractual savings for housing, or the “Bauspar” model, wherein a housing loan is linked to a savings deposit. In this system, an investor and a bank enter into a contract for housing construction. The investor deposits money for housing construction that earns interest below market interest rates, and is entitled to a housing loan – also below market rates - once a minimum accumulated amount of savings has been reached, as stipulated in the contract (usually at least 50 per cent of the loan amount). The investor repays the loan with interest based on the agreed rate in the contract, which is fixed, and therefore does not depend on market conditions. From the time the system was implemented until 1 February 2018, the bank signed 1,548,423 agreements on housing construction savings, amounting to KZT 4.9 trillion; total depositors savings reached KZT 525 billion; and 173,359 loans amounting to KZT 919 billion were granted.

From 1 November 2016, in accordance with the Standard Terms and Conditions of the Contract for Housing Savings, HCSB started to offer four different tariffs or products for contractual savings for housing with different savings/loan periods and loan interest rates. Savings accumulation period ranges from 3.5 to 15 years, depending on the deposit plan, and the interest rate on all types of deposits is 2 per cent per annum. Note that all HCSB products require an accumulated savings of at least 50 per cent of the contracted amount.\textsuperscript{113} When the investor has reached the required amount of savings, he is entitled to take out a mortgage loan at an interest rate of 4 per cent to 11 per cent per annum, payable up to 25 years. HCSB also offers products...

\textsuperscript{112} Ibid.

\textsuperscript{113} In accordance with bullet 7 Chapter 2 of the Standard Terms and Conditions of the Agreement on Contract Savings, the contracted amount is the amount of funds necessary for the investor to improve housing conditions, which consists of housing construction savings and housing loans.
that help improve the living conditions of citizens who do not have the required amount of savings through preliminary and intermediate housing loans.

It should be noted that the PRSP is also one of the main operators of the state programme “Nurly Zher”, through which the corresponding task of the program is realized (Task 3. Construction of credit housing through the system of housing savings).

Since the beginning of 2018, the program to provide housing for the military personnel has been implemented, which will also be implemented through the PRSP. In particular, according to the legislative changes introduced at the end of last year, the funds for housing payments will be transferred to specialized accounts of the military personnel in the second-tier banks. The amount of deductions will be equivalent to the cost of renting 18 m² of housing per family member. The rate for such loans is stated at the level of 6.8-7.8 per cent, and the loan period is up to 15 years. At the first stage (during 2018), about 11 thousand people are expected to participate, and in the next five years it is planned to involve another 60 thousand people.

Currently, almost all banks have mortgage programmes for acquiring real estate in the primary and secondary markets, as well as for improving living conditions. The initial down-payment for these types of loans ranges from 15 per cent to 50 per cent, and the loan term is up to 30 years. Some banks grant mortgages without a down-payment if the borrower provides an additional pledge. Interest rates on mortgages in the national currency range from 15 per cent to 23 per cent per annum. Mortgages in foreign currency in USD are also available, but the borrower should provide an official confirmation of income in that currency. Some banks place a moratorium on loans, and charge penalties for early repayment.

There are also specialized mortgage companies that provide housing mortgages. As of 1 January 2017, KMC JSC “Almaty Regional Mortgage Company”, JSC “Mortgage organization” and Express-Finance have started granting mortgages. The terms they offer are similar to those offered by banks - loan term of 20 years, interest rate of 17-19 per cent per annum (depending on the method of confirmation of income), and 30 per cent down-payment for loans in the national currency.

In accordance with Government Decree No. 179 of 17 February 2009 on Some Issues of Mortgage Loans Refinancing of Second-tier Banks, nine banks are implementing a state programme for refinancing foreign currency mortgages since it was expanded in February 2016. For this purpose, the NBKR has allocated KZT 120 billion to these banks for the refinancing of foreign currency mortgage loans amounting to KZT 120 billion. According to the terms of the programme, the foreign currency loans are converted to tenge, and refinancing is provided at an interest rate of no more than 3 per cent per annum, and the loan term is increased to 20 years. To qualify for refinancing, one must belong to a socially vulnerable group; the mortgage loan must have been granted during the period 1 January 2004 to 31 December 2009; the outstanding principal balance on the loan should not be more than KZT 36.5 million; and there should be a delay in payments of more than 90 days.

Delinquency and defaults on mortgage loans are isolated cases and are regulated out of court. In theory, the lender has several options to impose foreclosure on the mortgaged property:

• foreclosure of the mortgage through court;
• foreclosure of the mortgage out of court; or
• transfer of the pledged property to the lender in case of failure of auctioning.

115 Socially vulnerable citizens are defined in Art. 68 of Law No. 94-I of 16 April 1997 on Housing Relations.
Law No. 401-IV of 28 January 2011 on Mediation also regulates the resolution of mortgage disputes out of court.

Currently, two credit bureaux operate in the country - the TTO “First Credit Bureau” and the JSC “State Credit Bureau”\(^\text{116}\). The legislation provides for the mandatory provision of information to the State Credit Bureau for the following organizations: STBs, organizations carrying out certain types of banking operations, microfinance organizations; and individual entrepreneurs or legal persons selling goods and services on credit or through deferred payment. Compliance with this provision will allow the State Credit Bureau to generate a reference database of credit histories. In accordance with Law No. 573 of 6 July 2004 on Credit Bureaux and Formation of Credit Histories of the Republic of Kazakhstan, the NBRK shall regulate credit bureaux.

### C. PUBLIC AND PRIVATE FINANCING OF THE HOUSING SECTOR

Since independence, the provision of housing has been one of the priorities of the State’s policy. The Government is aware of the importance of assisting citizens in improving their living conditions. Since the mid-2000s, the Government has adopted a number of programmes aimed at increasing the affordability of housing. In particular, the following programmes were approved:

2. State Programme of Housing Construction in the Republic of Kazakhstan for 2008-2010\(^\text{118}\) (State Programme 2008-2010);
3. Programme for the Development of the Construction Industry and Production of Construction Materials in the Republic of Kazakhstan for 2010-2014\(^\text{119}\) (State Programme 2010-2014);
4. Programme of Housing Construction in the Republic of Kazakhstan for 2011-2014\(^\text{120}\) (Programme 2011-2014);
5. Programme “Affordable Housing 2020”\(^\text{121}\); and
6. “State Program Nurly Zher”.

The main goal of State Programme 2005-2007 was to increase the affordability of housing for the population by stimulating construction and implementing various financial mechanisms. It involved the construction of housing at a reduced cost (KZT 56,500 per m\(^2\), with a market value of KZT 126,000 and KZT 97,000 on the primary and the secondary market, respectively), which would help ease mortgage conditions for the population. In 2005–2007, KZT 1,113 billion of investments from all financial sources was allocated for housing construction, and 17.9 million m\(^2\) of residential houses are already operational (another 15.8 million m\(^2\) are planned).

State Programme 2008-2010 continued with the provision of housing at a reduced cost to priority categories of citizens. The number of potential beneficiaries was increased, to include those

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\(^{116}\) Established on the basis of NBRK Board Resolution No. 213 of 4 July 2012 on Approval of the Foundation of the Joint Stock Company State Credit Bureau. State Credit Bureau is a specialized non-profit organization and NBRK owns 100 per cent of its voting shares.

\(^{117}\) Approved by Decree of the President of the Republic of Kazakhstan No. 1388 of 11 June 11 2004.

\(^{118}\) Approved by Decree of the President of the Republic of Kazakhstan No. 383 of 20 August 2007.

\(^{119}\) Approved by Decree of the Government of the Republic of Kazakhstan No. 1004 of 30 September 2010.

\(^{120}\) Approved by Decree of the Government of the Republic of Kazakhstan No. 329 of 31 March 2011.

\(^{121}\) Approved by Decree of the Government of the Republic of Kazakhstan No. 821 of 21 June 2012.
who did not have enough funds for the down-payment through the application of a contract savings system based on a preliminary loan.

As mentioned previously, the construction industry was heavily hit by the global financial crisis, and it was at this time that State Programme 2008-2010 was being implemented. To prevent a slowdown in construction, the Government developed a plan of priority measures to ensure the stability of socio-economic development\(^\text{122}\). The main objectives of the action plan were: 1) to reduce the dependence of STBs on external funding; 2) to reduce the financing of small and medium business projects, as well as budgetary investment projects; 3) to ensure the stability of the mortgage market; and 4) to protect the rights of co-investors. The injection of budget funds in the sector of equity construction was considered by the Government as a “one-time action”, due to the need to prevent the collapse of the construction and related industries.

State Programme 2010-2014 continued with the objective of developing housing construction. Its main goal was to provide balanced sustainable production of building materials in the country. Increasing the share of building materials production to 80 per cent was among the goals of the Programme. Approved funding was KZT 38.6 billion.

Taking into account the substantial volume of public investments channeled into the sector of housing construction in 2008-2010, a significant decrease in the volume of private investments in housing construction also occurred. Private investment had financed more than 87 per cent of housing before the crisis, including 60 per cent of individual housing construction. The main reasons included the tightening of the requirements of supervisory authorities for the formation of STB provisions, the lack of cheap long-term funding in the domestic market from STBs, and the deterioration of STB collateral due to falling real estate prices. Furthermore, the lack of funding for the housing utilities infrastructure resulted in the decrease of the volume of individual housing construction. For example, under State Programme 2010-2014, KZT 10 billion was allocated for the period 2011-2012 for individual housing construction, including the budget for the utilities infrastructure. In previous years, KZT 30 billion was allocated annually for the same purpose, including KZT 10-15 billion for the construction of the housing utilities infrastructure.

On 31 March 2011, the Government adopted State Programme 2011-2014 in order to maintain the volume of industrial and individual housing construction and to attract private investment. The overall objective of this programme was to provide a comprehensive solution to the problems of the housing construction sector, which could help increase the affordability of housing for all groups of the population.

Within the framework of the Programme, new schemes of housing construction financing were envisaged: the implementation of a contract savings scheme through the HCSB; support for the construction of commercial, industrial and individual housing through the funding of STBs; and the construction/acquisition of real estate by JSC Samruk-Kazyna Real Estate Fund for subsequent rent/lease purchase and direct sale. The total amount of funding was KZT 488.3 billion.

Despite the achievements of the state programmes, housing was still inaccessible for most households. According to the Ministry of Economy, over 6 million people out of the 8.4 million economically active population still could not afford to buy housing on market terms. At the same time, the number of people on the housing waiting list continued to grow, and the level of provision of quality housing was rather low.

In order to address these challenges, an integrated audit and analysis of the existing programmes in the construction industry was conducted. Its results served as the basis for the development of new unified programme, “Affordable Housing 2020”. The programme envisaged 1) bringing the annual volume of rental housing construction to up to 1 million m$^2$ per year, 2) the development of rental-purchase mechanisms, and 3) establishing a set of measures for the development of the construction industry. In view of the devaluation of the national currency in late 2014, the programme was transformed. Effective 1 January 2015, the programme became the “Regional Development Programme 2020”, which combined the following five programmes:

1. “Regional Development”;
2. “Mono-cities Development Programme for 2012-2020”;
4. “Ak Bulak for 2011-2020”; and
5. “Affordable housing 2020”.

The amount of funding from the State, local budgets and extrabudgetary sources amounted to KZT 2.2 trillion until 2019. In addition to these areas, the Regional Development Programme until 2020 provided funding for credit, commercial and rental housing in the amount of KZT 277 billion under “Nurly Zhol”123.

The implementation of state programmes is mainly focused on increasing housing affordability in urban areas. Housing provision for 43.1 per cent of the rural population is 17.4 m$^2$ per person, which is lower than the 20.9 per cent national average. According to the Committee for Construction, Housing and Utilities, the number of people waiting for a 0.1 hectare land plot for individual housing construction is about 1.2 million, which is almost half of the number of people needing improvement in their living conditions. According to the Land Code of the Republic of Kazakhstan, only land plots with developed utilities infrastructure can be transferred to private ownership.

At the end of 2016, the Government adopted the new housing programme “Nurly Zher”124. This programme aims to develop new approaches to stimulate housing construction, to improve housing affordability and to integrate various housing programmes into one.

Under this new programme, housing policy is focused on shifting the accent from budgetary to extra-budgetary funding. Funds for housing construction allocated under the state programmes “Nurly Zhol” for 2015-2019 and “Regional Development Programme until 2020” will be concentrated and redistributed into this programme.

Nurly Zher has seven goals, which refer to the specific tasks of the programme.

**Task 1. Increasing the affordability of mortgages**

In order to increase the affordability of mortgages, it is proposed to subsidize the interest rates of banks on mortgages for citizens. Subsidies are provided only for housing mortgage loans provided by the second tier banks, at a rate of no more than 16% per annum.

Annually, within the framework of the Program, subsidies are provided from the republican budget for reimbursing part of the interest rate equal to the amount of maximum 6% per annum of the interest rate on mortgage housing loans for purchasing of the housing (after the subsidy,

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123 Approved by Order of the President of the Republic of Kazakhstan No. 1030 of 6 April 2015.
the interest rate for the final borrower will be no more than 10% per annum) that will be channeled through the financial agent KMC.

**Task 2. Stimulation of housing construction by private developers**

In order to increase the supply of housing by private developers, it is proposed to subsidize interest rates on loans issued by STBs to private developers for the construction of new housing (subsidies will be provided only for mortgages disbursed by the STB, at a rate not exceeding the base rate of the NBRK by more than 5 per cent, relevant for the time of the decision to subsidize). From 2017, the State, through the JSC “DAMU Entrepreneurship Development Fund” (EDF Damu), an investment arm of JSC “NMH Baiterek”, will grant subsidies of up to 7 per cent of the interest rate on loans to private developers.

However, the loan term and the term of subsidizing of the interest rate must be the same, and must not exceed 36 months. Under this programme, the developer is required to sell at least 50 per cent of the commissioned housing to participants of the contract savings system through the HCSB at fixed prices – up to KZT 260,000 per m² in Astana, Almaty and their suburbs, and up to KZT 220,000 in other regions. The volume of funding for 2017 is expected to be KZT 157 billion.

**Task 3. Construction of credit housing through the contract savings system**

Under the framework of this task, credit housing construction will continue, including for those people registered in the waiting lists of LEAs. The funding mechanism for credit housing construction will be implemented as follows:

1) the issuance of two-year LEA bonds with the redirection of funds previously allocated for new construction projects;

2) the placement of “conditional” deposits in STBs (interest rate on the “conditional” deposit should not exceed 3 per cent per annum, and the effective rate on loans granted by STBs should not exceed more than 7 per cent per annum); and

3) the attraction of funds from international financial institutions under guarantees by quasi-public sector entities.

Construction of credit housing through LEAs will be financed by borrowed funds from the quasi-public sector entities through the issuance of securities with a maturity of up to two years and a coupon of 0.15 per cent per annum twice a year.

Additionally, the Government provides the right to allocate loans from the national budget to LEAs for the implementation of HCSB housing construction projects at a rate of 0.01 per cent per annum.

Financing of credit housing construction by LEAs will be implemented through the issuance of securities and raising funds for purchasing from the following sources:

1) KZT 67 billion from the JSC “National Management Holding Baiterek” (JSC “NMH Baiterek”) in 2016 to purchase debt securities (bonds) of LEAs;

2) Redirection in 2018 of KZT 113 billion provided by JSC “NMH Baiterek” in 2016 for the construction of rental and credit housing; and

3) Redirection in 2018 of KZT 97 billion provided by JSC “Samruk-Kazyna” in 2016 for the construction of commercial housing.
An additional mechanism for financing the construction of credit housing is the placement of “conditional” deposits in STBs. It is also assumed that JSC NMH “Baiterek” will raise funds from international financial organizations under corporate guarantees for financing credit housing construction. It is expected that, by 2021, the volume of housing construction under this task will reach 1.8 million m² per year.

**Task 4. Creation of rental housing stock for the socially vulnerable population**

Involves the target transfer of the state budget to regional budgets and to the budgets of the cities of Astana and Almaty for the design and construction of rental housing by LEAs for socially vulnerable groups of people who are on the waiting lists of the LEAs. At the same time, the construction of rental housing at the expense of the budgets of the LEAs without purchase option is allowed.

The planned annual commissioning of rental housing is 150,000 m² per year.

**Task 5: Development of individual housing construction**

In order to finance the construction of individual houses, LEAs may channel the funds raised through the issuance of debt securities under the direction “Construction of credit housing through the system of contract savings”. People on the waiting lists participating in pilot projects have the right to buy finished individual houses with the land plot that is provided with housing utilities infrastructure, or to obtain a loan from the HCSB for its purchase.

The HCSB provides loans with reduced interest rates for the purchase of individual houses. Under the direction “Increasing the affordability of mortgage lending”, the Government provides grants of up to 7 per cent per annum of the lending rates on preliminary and intermediate housing loans in order to reduce the borrower’s annual interest rate on a loan to up to 5 per cent, for a maximum period of five years. The interest rates subsidy ends after this period. For these purposes, the HCSB raises funds on the market. It is expected that, under this task, the volume of housing construction will reach 5.5 million m² per year by 2021.

**Task 6. Creation of commercial and rental housing stock**

Within the framework of this task, the implementation of the following areas of housing construction, previously stipulated in the programmes Nurly Zhol and Regional Development until 2020 will be completed:

1) rental housing for people on LEAs’ waiting lists and for young families;
2) rental housing with purchase from KMC;
3) JSC Bayterek development rental and credit housing ;
4) commercial and rental housing with purchase from JSC Samruk-Kazyna.

**Task 7. Support of equity housing construction**

This task will continue the implementation of previously provided mechanisms for the protection of housing equity contributions, the financing of HCSB housing projects with private developers, and the pilot project of the emergency demolition of housing in the city of Astana. It is expected that the volume of contributions, accumulated in the HGF to guarantee equity construction, will increase from KZT 100.5 billion in 2017 to KZT 199.1 billion in 2021.
The funding for the implementation of the programme will come from the state budget; private investments, including those from the quasi-public sector; and other funds raised from the capital market, including funds from the Single Accumulative Pension Fund. The total volume of funding for the period 2017-2021 is KZT 1.542 trillion, of which KZT 802.8 billion will come from the state budget and KZT 739 billion from extra-budgetary sources.

Despite the considerable amount of investments in housing construction by the State, its share in the total amount of funding is no more than 10 per cent. The largest volume of construction was financed by the population, which has significantly increased in the last two years (from 43 per cent to 51 per cent in the first nine months of 2016). At the same time, the number of apartments commissioned by individual developers over the past three years accounted for 40 per cent of the total volume of commissioned apartments.

Table 4
**Investment in housing construction by financial sources** (in billions of Kazakhstani tenge)

<table>
<thead>
<tr>
<th>Sources of financing</th>
<th>2014</th>
<th>2015</th>
<th>As at 01 December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>National budget</td>
<td>89</td>
<td>84</td>
<td>46</td>
</tr>
<tr>
<td>Local budget</td>
<td>47</td>
<td>35</td>
<td>42</td>
</tr>
<tr>
<td>Own funds</td>
<td>331</td>
<td>435</td>
<td>487</td>
</tr>
<tr>
<td>Including funds of the population</td>
<td>222</td>
<td>309</td>
<td>330</td>
</tr>
<tr>
<td>Bank loans</td>
<td>54</td>
<td>63</td>
<td>55</td>
</tr>
<tr>
<td>Including funds of foreign banks</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other borrowed funds</td>
<td>92</td>
<td>102</td>
<td>65</td>
</tr>
<tr>
<td>Including funds of non-residents</td>
<td>0.08</td>
<td>0.03</td>
<td>0.07</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>614</td>
<td>719</td>
<td>695</td>
</tr>
</tbody>
</table>

*Source: Committee on Statistics of the Republic of Kazakhstan*

**D. LINK BETWEEN HOUSING POLICY AND THE BANKING SYSTEM**

*Banking System*

To date, the banking sector is the largest and most dominant segment of the financial market. According to the NBRK, as of 1 January 2018, 32 STBs were operating in the country, 13 of which had foreign participation, including 11 subsidiary STBs.

Until mid-2007, credit organizations actively borrowed from the international capital market (syndicated loans, debt financing). After the global financial crisis, the Agency of the Republic of Kazakhstan on Regulation and Supervision of Financial Market and Financial Organizations took measures to increase banks’ capitalization requirements regarding liabilities to non-residents; to increase the capital adequacy of banks in relation to real estate loans and consumer lending; and to improve the risk-management system and internal control of STBs.

Starting in 2011, the banking sector started to show gradual recovery. However, growth dynamics indicate a lack of efficiency of the banks on the reallocation of resources in the economy, and in meeting the demand for loans (Table 5).

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125 Decree of the President of the Republic of Kazakhstan No. 25 of 12 April 2011 transferred the functions and powers of the Agency to the NBKR.
Table 5
Comparative dynamics of some banking indicators, 2011-2016

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Billions of Kazakhstani tenge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>27 572</td>
<td>31 443</td>
<td>34 443</td>
<td>38 624</td>
<td>40 884</td>
<td>44 354</td>
<td>48 392</td>
</tr>
<tr>
<td>Banking sector assets</td>
<td>12 817</td>
<td>13 870</td>
<td>15 462</td>
<td>18 239</td>
<td>23 780</td>
<td>25 561</td>
<td>24 221</td>
</tr>
<tr>
<td>Banking sector liabilities</td>
<td>12 975</td>
<td>11 873</td>
<td>13 384</td>
<td>15 880</td>
<td>21 290</td>
<td>22 716</td>
<td>21 130</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets/GDP ratio</td>
<td>46.5</td>
<td>44.1</td>
<td>44.9</td>
<td>42.7</td>
<td>57.6</td>
<td>57.6</td>
<td>57.7</td>
</tr>
<tr>
<td>Loan portfolio/GDP ratio</td>
<td>38.0</td>
<td>37.1</td>
<td>38.8</td>
<td>36.7</td>
<td>37.7</td>
<td>35.0</td>
<td>28.1</td>
</tr>
<tr>
<td>Return on equity (ROE)</td>
<td>-0.94</td>
<td>26.52</td>
<td>13.15</td>
<td>13.17</td>
<td>15.4</td>
<td>15.18</td>
<td>-0.63</td>
</tr>
<tr>
<td>Return on assets (ROA)</td>
<td>-0.1</td>
<td>1.61</td>
<td>1.77</td>
<td>1.64</td>
<td>1.96</td>
<td>1.64</td>
<td>-0.08</td>
</tr>
<tr>
<td>Share of the five largest banks:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the assets of STBs</td>
<td>65.3</td>
<td>60.0</td>
<td>55.4</td>
<td>52.4</td>
<td>59.2</td>
<td>58.2</td>
<td>57.5</td>
</tr>
<tr>
<td>In the total loan portfolio of banks</td>
<td>70.9</td>
<td>65.3</td>
<td>62.1</td>
<td>58.9</td>
<td>63.4</td>
<td>60.6</td>
<td>56.6</td>
</tr>
<tr>
<td>In the total deposits of clients</td>
<td>62.2</td>
<td>57.5</td>
<td>54.4</td>
<td>51.0</td>
<td>60.6</td>
<td>58.2</td>
<td>57.5</td>
</tr>
</tbody>
</table>

Source: NBRK.

From 2011 to 2017, banking sector assets have almost doubled, from KZT 12,817 billion to KZT 24,2 billion. However, in relation to GDP, the volume of banking assets increased only by 11 per cent. The situation of the loan portfolio of the banking sector is similar. As of 1 January 2018, it was KZT 13,6 trillion, an increase only of 58.7 per cent from its 2011 level. However, the loans/GDP ratio, which reached a maximum of 66.7 per cent in 2007, remained low at 28 per cent by the beginning of 2018. Therefore, there is a decrease in the level of assets and the volume of loans in relation to GDP, which can be attributed to unbalanced lending to sectors of the economy, low diversification of the loan portfolio, and short-term funding. The portfolio of issued loans is characterized by an increasing concentration in the non-productive sector; a high proportion of turnover, mainly in the trade and services sectors, which brings quick and high returns but does not participate in creating the final product and increase of real GDP.

At the same time, a serious challenge to the adequate and balanced development of the economy is the high concentration of the banking sector in the five largest banks, whose assets share is nearly 60 per cent.

One other problem of the banking system of Kazakhstan is its fund base. Historically, deposits of firms and individuals formed more than half of the fund base of the banking system. After the global financial crisis, access to foreign capital markets for Kazakh financial institutions became limited due to the increased financial risk and decreased interest of potential foreign investors in the debt instruments of the country. This situation provided the impetus for banks to use domestic funding sources. Since 2013, banks began to use undistributed earnings as an additional source of capital (Table 6).
Over the last five years, there has been a growth in the deposit base of the banking sector, due to currency revaluation. Given that a substantial part of the deposits is fixed-term deposits, which depositors could claim ahead of schedule, the deposit base is regarded as a relatively stable source of funding only because of its high exchange rate volatility. Therefore, banks are forced to provide loans in foreign currency or bear credit risks.

The stock market currently remains weak, especially due to the pension reform and the reduced demand for securities, previously provided by private pension funds. As of 1 September 2016, the amount of funds raised through the issuance of securities was less than 8 per cent. Thus, the resource base of the banking sector is quite expensive due to the shortage of long-term sources of funding, which in turn affects the cost of long-term loans to final borrowers.

Table 6
Structure of funding sources of the banking sector
(Percentage of the total liabilities)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interbank deposits</td>
<td>0.8</td>
<td>1.2</td>
<td>1.8</td>
<td>2.1</td>
<td>2.1</td>
<td>1.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Loans received</td>
<td>4.8</td>
<td>4.4</td>
<td>3.8</td>
<td>5.4</td>
<td>43</td>
<td>4.8</td>
<td>3.4</td>
</tr>
<tr>
<td>Deposits of clients</td>
<td>60.8</td>
<td>61.5</td>
<td>63.7</td>
<td>62.2</td>
<td>65.6</td>
<td>67.6</td>
<td>68.9</td>
</tr>
<tr>
<td>In foreign currency</td>
<td>32.7</td>
<td>31.3</td>
<td>37.2</td>
<td>57.8</td>
<td>69.2</td>
<td>53.8</td>
<td>47.6</td>
</tr>
<tr>
<td>Issued securities</td>
<td>11.7</td>
<td>7.2</td>
<td>6.3</td>
<td>6.7</td>
<td>8.8</td>
<td>7.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Share capital</td>
<td>20.0</td>
<td>20.1</td>
<td>18.2</td>
<td>15.9</td>
<td>6.6</td>
<td>6.3</td>
<td>8.2</td>
</tr>
<tr>
<td>Reserve capital</td>
<td>3.1</td>
<td>3.2</td>
<td>3.3</td>
<td>2.6</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Undistributed net income (loss) of the current year</td>
<td>0.3</td>
<td>-1.5</td>
<td>1.5</td>
<td>1.6</td>
<td>0.9</td>
<td>1.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>-1.5</td>
<td>3.9</td>
<td>1.3</td>
<td>3.6</td>
<td>10.5</td>
<td>10.0</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Source: NBRK

A high share of “non-performing” loans has destabilizing effect on the banking activity. Over the last few years, starting from 2010, the share of non-performing loans (4 and 5 category) in the loan portfolio of the banking system was consistently high at 36-37 per cent. This indicates that the potential use of “classic” banking instruments for improving asset quality, such as debt restructuring, is almost exhausted. In this regard, several mechanisms for improving the quality of bank assets were implemented in 2012. The mechanisms are the following a): sale of distressed assets to JSC “Fund of problem loans” and subsidiaries of banks that acquire doubtful and bad assets of parent banks; and b) the extension of terms for the remission of “bad” debts to end-2015 without incurring additional tax liabilities for the banks. This move has brought down the share of loans in arrears from 23.6 per cent in 2015 to 8 per cent in 2016.

126 4 category – doubtful loans that have arrears of 61-90 days; 5 category - unprofitable loans with arrears of more than 90 days.
The banking sector has slowly recovered after the global financial crisis but challenges remain. International rating agencies outline the following factors hampering full recovery: a) extremely high credit risk due to aggressive underwriting standards and a weak payment culture; b) a significant mismatch between foreign currency loans and deposits; and c) low profitability adjusted for risk, due to lower margins and rising of provisioning costs. Moreover, economic risks in the country remain high, as the economy, which depends on raw materials, is pressured by low and volatile oil prices against the backdrop of a significant weakening of the national currency from August 2015.

The level of banking industry risk also remains high because Kazakh banks are still dependent on a significant amount of currency swaps in the interbank market and by the NBRK, taking into account the very high, albeit decreasing, level of “dollarization” of deposits. The rating agency, Standard & Poor, also predicts a decline in the level of savings and increased volatility of deposits of state companies, firms and individuals.\(^{127}\)

**Microfinance**

As of 1 October 2017 (the latest available data of the NBRK at the time of writing), there were 147 microfinance organizations (MFOs) registered in the country. Previously, MFOs were not under the control of the NBRK. On 26 November 2012, the Law No. 56-V on Microfinance Organizations was adopted, which required all MFOs to register with the NBRK before 1 January 2016.

According to the latest available data of NBRK, the volume of MFO assets is KZT 180 billion, an increase of 41.3 per cent from the beginning of the year. Originated loans (84.2 per cent) occupy the largest share in the assets of MFOs, followed by share deposits (6.5 per cent). The volume of total liabilities of MFOs is KZT 120 billion, of which 95 per cent are attracted loans. Such a high proportion of loans to total liabilities is due to government programmes supporting businesses through microfinance that focuses only on providing lower interest rates to final borrowers (households) and do not take into account the interests of the MFOs themselves. Traditionally, high rates of microfinance products are the result of large transaction costs of loans rather than high risks of default, as evidenced by official statistics. According to the NBRK, the share of NPLs as of 7 January 2016 was only 4 per cent, while the same indicator for the banking sector was 8 per cent. Legislative restrictions of MFOs through the issuance of securities or in attracting deposits significantly affect the cost of financial resources for MFOs.

The Government recognizes the importance of the development of the micro lending industry, and is taking some actions in this direction. In particular, the EDF Damu in its Development Strategy for 2014-2023 had planned to invest about KZT 1 billion in 2016 as initial support to MFOs.

In particular, within the framework of the Programme for the Development of Productive Employment and Mass Entrepreneurship, it is envisaged to introduce microcrediting of entrepreneurial activities in cities, as well as to provide state guarantees for microcredits for self-employed and unemployed people who plan and implement projects in cities. According to this program, it is planned to issue about 2500 loans. It is planned to provide micro-loans for up to KZT 16 million with a final interest rate of 6%.

In the same year, microfinance institutions were to receive financial support from the World Bank, the Asian Development Bank, the European Bank for Reconstruction and Development

and European Investment Bank. Funds received from international financial organizations would be issued to EDF Damu and the NBRK, which would provide the MFOs with liquidity in the local currency.

EDF Damu estimates that the total volume of microfinance funding until 2020 will reach about KZT 15 billion, which will allow loan provision to 27,000 borrowers. Moreover, a special loan product is being developed, wherein EDF Damu will act as guarantor for a loan.

Currently, microfinance is mainly used for lending to business activities (financing of working capital) in private farming and for renovation to improve the energy efficiency of housing. For a private farming business, the borrower can apply for an unsecured loan of up to KZT 500,000, with a collective guarantee of 3 to 10 people, payable for a period of up to 18 months. For the purposes of improving the energy efficiency of housing, the loan amount could be up to KZT 1 million, payable in 36 months. The maximum loan amount that MFOs extend should be in accordance with the regulations of the Law on Microfinance Organizations, that is, the loan amount should not exceed 8,000-fold of the monthly calculation index (MCI)\textsuperscript{128} for the respective year.

Stock Market

The stock market is currently underdeveloped and does not function as a means to attract funding for banks and organizations. Currently, the lion’s share of trading volume is in the sectors of foreign currency and repurchase agreement (repo) transactions (38 per cent and 60 per cent, respectively). However, the volume of trading of corporate debt securities accounts for less than 1 per cent (Table 7).

In particular, the market of mortgage-backed securities is not well developed, and not even considered by credit institutions as a separate full-fledged source of funding. However, the necessary infrastructure to ensure the effective mechanism of issuance and circulation of mortgage-backed securities\textsuperscript{129} is available in the country. Banks issuing mortgages do not issue mortgage-backed securities, and keep the mortgage loans on their balance sheets, or refinance them through the KMC under government programmes.

The main reason for this situation is the lack of large institutional investors in mortgage-backed securities, for example, private pension funds, which were merged into a single state pension fund – Unified Accumulated Pension Fund (UNPF) during the government pension reform. According to the NBRK, as of 12 January 2016, the UNPF will be the only organization that will carry out the accumulation of obligatory pension contributions. The UNPF acts in accordance with the investment declaration\textsuperscript{130}, which defines the subjects of investment, and the conditions and restrictions on investments of UNPF assets. According to the declaration, the permitted amount of investment should not be more than 20 per cent of the portfolio in securities secured by real estate, and in assets with ratings (either of the securities and/or the issuer) of not less than BBB- on the scale of the S & P rating agency or a similar level from another international rating agency. As of 1 September 2016, the amount of pension savings of citizens amounted to KZT 6.6 trillion. Therefore, the potential amount of investment in mortgage–backed securities in the sector of pension savings alone is KZT 1.33 trillion.

\textsuperscript{128} MCI is established by the Law on Republican Budget for the relevant period, and is used to calculate benefits and other social payments, as well as for the application of penalties, taxes and other payments in accordance with the legislation.

\textsuperscript{129} The issuance of securities is regulated by the Law No. 461 on Securities Market of 2 July 2003.

\textsuperscript{130} Approved by the Law No. 105-V on Retirement Insurance in the Republic of Kazakhstan of 21 June 2013.
Table 7
Volume and structure of the stock market

<table>
<thead>
<tr>
<th>Sector of stock market</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Percentage</td>
</tr>
<tr>
<td>Foreign currency</td>
<td>36 124</td>
<td>38.2</td>
</tr>
<tr>
<td>Government bonds</td>
<td>556</td>
<td>0.6</td>
</tr>
<tr>
<td>Stocks</td>
<td>250</td>
<td>0.3</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>507</td>
<td>0.5</td>
</tr>
<tr>
<td>REPO operations</td>
<td>57 114</td>
<td>60.4</td>
</tr>
<tr>
<td>Bonds of investment funds</td>
<td>0.5</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Bonds of MFOs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Futures</td>
<td>&lt; 0.1</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Total</td>
<td>94 552</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Kazakh stock exchange

As measures to reduce long-term liquidity shortage, in 2016, the NBKR started to create the conditions for the formation of a yield curve, designed to serve as a benchmark for money value in the domestic market. Furthermore, the volumes of credit notes placed by the NBRK were increased and terms of the notes were extended. For the first time since 2008, credit notes with a maturity of one year were issued. In September and November 2016, two auctions were held where the demand for notes was significantly oversubscribed. Moreover, the interest of foreign participants in Kazakh debt instruments was observed.

Since 15 November 2016, the NBRK has started to transact in the secondary market with government securities of the Ministry of Finance, with maturities of from two to five years. It is important to note that these measures could contribute to an increase in the volume of long-term liquidity in the national currency.

E. HOUSING AFFORDABILITY, AVAILABILITY OF HOUSING FINANCE, FINANCING OF HOUSING IMPROVEMENT

According to the latest available data of the Committee on Statistics, housing provision in 2013 was 20.9 m² per capita – 23.7 m² in urban areas and 17.4 m² in rural areas. This indicator is much higher in developed countries; in Germany, the value is 45 m²; in the UK, 62 m²; and in the US, 75 m².

At the same time, according to official data of the CCHCS, as of 1 September 2016, 2.3 million people were in need of housing, including the following categories: people on the waiting lists of akimats (more than 400,000), depositors of the HCSB (more than 700,000), and those on the waiting list to receive 10 acres of land (more than 1.2 million). Thus, about 14 per cent of the population is officially recognized as in need of better housing conditions.

132 In accordance with Art. 50 of the Land Code of the Republic of Kazakhstan (land plots are provided to citizens for housing construction in the amount of 0.1 hectare at no cost).
According to the Committee on Statistics, in December 2016, the average price of real estate in the secondary market was KZT 190,000 per m². In the cities of Astana and Almaty, it was more than 1.5 times the national average (KZT 317,000 and KZT 337,000, respectively). This price level is unaffordable for the majority of households: the average housing affordability index (HAI) for the country is 5.0134, and 4.6 and 3.6 for the cities of Almaty and Astana, respectively.

Many banks offer loans for housing repair or renovation. People can avail of such loan through the guarantee of the mortgaged real estate, and loan conditions vary depending on the currency of the loan, the presence of collateral, the income verification method, and the availability of bank commissions. For loans in the national currency with commission (which is usually equivalent to 1 per cent of the loan amount), interest rates start from 20 per cent per annum, and 22 per cent for loans without commission. Interest rates on dollar loans start from 13 per cent. Loan amounts granted range from KZT 600,000 to KZT 10 million, with terms ranging from 12 to 360 months.

The World Bank’s “Kazakhstan Energy-Efficiency Project” aims to improve the energy efficiency in public and social facilities, as well as improving the conditions for the establishment of financial mechanisms for energy-saving projects. The Swiss Agency for Development and Cooperation provided a USD 21.8 million grant for this Project through the Trust Fund administered by the World Bank. The grant agreement on the Project was signed and approved on 1 June 2015.

F. ROLE OF NATIONAL AND LOCAL HOUSING FINANCE AUTHORITIES

The implementation of housing policy is considered one of the most important objectives of the state policy. A number of government housing programmes are available. However, a comprehensive market research of the demand and opportunities of the population, STBs and developers was not conducted.


The CCHCS is responsible for the development and implementation of housing policy in the country. A number of government institutions implement government housing programmes. There is no single state body (for example, in the form of an institution for development) responsible for the formation and implementation of state policy in the housing sector, and for the development of long-term objectives in the field of housing finance.

One of the largest public institutions, the National Managing Holding “Baiterek”, is composed of four companies, and its activities are concentrated in the area of housing finance:

- JSC “Mortgage organization Kazakhstan Mortgage Company” - implementation of government programmes on rental housing, as well as refinancing STBs by purchasing rights of claims on mortgage loans;
- JSC “Baiterek Development” - implementation of investment projects in the residential and commercial property sectors, and production of building materials; and return of funds allocated for anti-crisis measures and completion of financing of projects of equity housing construction that were frozen;

134 When calculating the HAI, the area of the purchased apartment was accepted at a rate of 54 m², and the size of the household at 3.6 people. The average nominal income per capita was used, adjusted for the subsistence level (67 112 KZT for the Republic of Kazakhstan; 128,956 KZT for Astana; and 111,530 KZT for Almaty).
- HGF (on the basis of the Kazakhstan Fund of Guarantee of Housing Loans)\(^{135}\) – provision of guarantees to co-investors for the completion of construction of residential houses or buildings if developers fail in this respect;
- JSC “Housing Construction Savings Bank of Kazakhstan” – development and implementation of the contract savings system.

Separately, the JSC “Real Estate Fund Samruk-Kazyna”\(^{136}\) was established to promote the development of the construction industry and the real estate market by investing in the use of “green” and other innovative technologies in construction. It is currently one of the operators of the State programmes “Regional Development until 2020” and the infrastructural development programme “Nurly Zhol”. It was expected that JSC Real Estate Fund Samruk-Kazyna would start implementing large-scale projects in the field of “green” development and development of commercial real estate in 2017.

According to Article 55 of the Tax Code of the Republic of Kazakhstan, 13 kinds of taxes, 1 state duty, 5 types of registration fees, and 10 different types of fees are levied by governments at various levels.

Funds received from taxes and other obligatory payments are allocated in accordance with the Budget Code of the Republic of Kazakhstan and the Law on the Republican Budget.

According to the Budget Code, the tax system of the country can be described as three-tier and, depending on the types and the source, taxes are distributed to:

- national budget;
- regional budgets, city budgets of city of national importance (Almaty) and the capital (Astana); and
- regional budgets, budgets of cities of regional importance.

However, local/regional budgets are sort of “transit” budgets, as funds transferred from the national budget are subsequently redistributed directly to the budgets of the cities and regions where they are actually spent.

Proceeds from land and property taxes are directed to regional budgets, as well as the budgets of cities of national importance. The object of taxation of land tax is all land according to its purpose specific category. The tax base for the calculation of this tax is the area of the land plot. The base rates on agricultural lands are established per hectare, and are differentiated by the quality of the soil. Base rates for agricultural land provided to individuals for personal household (auxiliary) farming, gardening and countryside construction, including land occupied by buildings, are established as follows:

- with an area up to 0.50 hectare – KZT 20 per 0.01 hectare; or
- with an area of more than 0.50 hectare – KZT 100 per 0.01 hectare.

Tax base rates for land settlements occupied by housing stock are set at KZT 0.96 to KZT 5.2 per m\(^2\).

The objects of taxation of property tax for individuals are dwellings, buildings, cottages, garages and other structures and premises belonging to them by right of ownership. The rate of property tax of individuals is progressive, and is calculated as follows: a fixed payment plus a percentage of the amount exceeding a certain limit.

\(^{135}\) Established under the framework of the Law “on equity participation in housing construction”.

The minimum property tax rate is 0.05 per cent of the value of the object of taxation up to KZT 2 million. The maximum rate (KZT 2.9 million) is charged when the value of the property is more than KZT 450 million, plus 2 per cent of the amount exceeding KZT 450 million.

Despite the large number of various taxes and fees levied in accordance with Kazakhstan’s legislation, the rates of major payments to the budget (income tax, value-added tax, excise duty, etc.) are low compared to other CIS countries in particular and to the world in general.

The role of local authorities is to implement the tasks that are set at the federal level. Local executive bodies usually do not make any significant changes to the mechanism for implementing the state program, and because of the limited financial resources they do not implement their own programs.

Conclusions on Financial Framework for the Housing Sector

Housing policies have been a major government policy priority in the Republic of Kazakhstan since the country gained its independence in 1991. The Government has always placed much focus on addressing citizens’ “housing challenges.” Among other things, it adopted many government programmes containing a number of mechanisms to provide citizens with housing. However, it is worth noting that, despite such massive funding, the country still experiences a significant shortage of housing, the housing being unaffordable for the population even within the framework of existing government reimbursement programs. This situation is partly due to the following reasons: there is no regular monitoring of actual needs and means of the population when government housing programmes are developed; government programmes are focused only on homeownership, not sufficient consideration was so far given to other ways of meeting the needs of the population (for example, by means of non-profit rental housing stock). At the same time, one of the objectives of the recent ambitious government programme “Nurly Zher” is the construction of rental housing with no purchase option (at the end of 2017, there were constructed 50 thousand such apartments), which will diversify the range of available tools to improve the affordability of housing for the citizens and increase their labour mobility.

Currently, all government programmes are implemented only at the national level. In practice, local executive authorities (hereinafter referred to as LEAs) play the role of mere executants of government programmes, and at the same time because of their limited finances and legislative powers they cannot adequately develop and implement housing programmes.

As far as the population is concerned, the primary way of acquiring property, both upon the market conditions and through government programmes, is by means of mortgage lending or contractual savings (implemented through the House Construction Savings Bank of Kazakhstan). At the same time, the bigger share of loans belongs to the HCSB (about 75% of the total amount of housing loans in the country), which is due to much more favorable loaning terms.

Specifically, while under the house construction savings system the maximum amount of interest rates on loans is 5% with the loan period of up to 25 years (on condition of accumulation of half of the contracted amount\(^\text{137}\)), the mortgage interest rates in second-tier banks (hereinafter referred to as STBs) are much higher (from 15 to 23% per annum according to the amount of the initial instalment) with the loan period of up to 30 years. It should be noted that in the

\(^{137}\) According to paragraph 5 of Chapter 1 of the Standard Terms and Conditions of the Housing Construction Savings Agreement of JSC Zhilstroysberbank of Kazakhstan, the contractual amount is the amount of money necessary for the investor to carry out measures to improve housing conditions, consisting of housing construction savings and housing loans. The contract amount is determined by the Depositor independently at the time of signing the Application for Joining the Housing Construction Savings System.
context of the house construction savings system, depositors can be awarded a bonus from the Government (up to 20% of the amount of savings).

The product range of STBs currently does not include loans targeted at improving energy efficiency of homes. The banks’ product range includes standard loans for repairs, which borrowers can use for improving the energy efficiency of their homes. Specialized energy efficiency loans are offered only by microfinance organizations. However, they have limitations in terms of the loan amount and cannot fully meet the demand in this segment. To cover this quite significant lending segment, at the national level it is necessary for the government to implement policies aimed at the introduction of international lending practices to improve housing energy efficiency, which will grant some preferences to the borrowers (e.g., reduction of the amount of utility payments).

Such limited loan product range of STBs is due to the lack of sustainable long-term funding in local currency and significant dollarization of the country’s economy. The funding base of the banking sector consists of almost 70% deposits, of which about 50% are those in foreign currency. To reduce the risks, banks now prefer short-term loans with a quick turnover period. Also, the country’s stock market fails to function as a channel to attract long-term debt financing, and the domestic market of securities and institutional investors needs to be developed. Notably, the mortgage-backed securities market is currently underdeveloped due to the lack of investment in long-term assets.

Overall, it should be noted that in practice there is no long-term funding from foreign institutional/private investors. Foreign investments are attracted only on a short-term basis. The Government should provide incentives to the local businesses engaged in large-scale housing projects.

The housing construction sector in the Republic of Kazakhstan is not transparent. Despite a fairly large number of developers (about 7.5 thousand), this industry faces significant administrative barriers, poor competition, and lack of transparency. Moreover, the requirement to deduce 2-6% of the cost of projects to the Housing Construction Guarantee Fund established in October 2016 will work towards the exit of smaller market players, which will entail further monopolization of the housing market.

In this regard, the government needs to take action to improve the transparency of the construction industry in order to increase competition within the sector, including through arrival of foreign players, reduction of housing prices, and increased housing affordability for the citizens.
PART III
SUSTAINABLE URBAN DEVELOPMENT AND SMART CITIES: ACHIEVEMENTS, OPPORTUNITIES AND CHALLENGES FOR ASTANA TO BECOME A MODEL OF SMART AND SUSTAINABLE CITY

The ECE and the International Telecommunication Union (ITU) define a smart sustainable city (SSC) as an innovative city that uses ICTs and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental and cultural aspects. A smart city, therefore, can be understood to be an agglomeration that enables each of its residents to access all services (public and private) in a way best suited to his or her needs. It implies the building of adequate hard infrastructure, human capital and skills, community institutions and (digital) technologies that fuel sustainable development and provide an attractive environment to foster innovation and human well-being. In other words, smart cities can be described as a process by which urban centres become more sustainable, inclusive, safe, resilient to climate change, and able to respond more quickly to development challenges. In addition to fostering local innovation, the embeddedness of smart cities in world networks of knowledge and technology has also been emphasized. Thus, smart cities are also cities which have successfully built experience in attracting foreign direct investment (FDI) from global sources, which have become socially and economically open to the rest of the world as well as environmentally sustainable.

With the global urban population forecast to reach 5 billion by 2030, the need for smart and sustainable cities has become more urgent. The United Nations Sustainable Development Goals (SDGs) under 2030 Agenda for Sustainable Development (2030 Agenda) call for improved policy calibration in order to achieve improvements in each of these two areas (smart cities and sustainable urban development). Whereas the “urban” SDG 11 includes targets to “make cities and human settlements inclusive, safe, resilient and sustainable”, the “infrastructure” SDG 9 calls for Member States to work together to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”.

Moreover, innovation activities, which are fundamental for achieving each of these objectives, are recognized as a significant pillar for the implementation of the entire 2030 Agenda.

In this context, the implications for countries seeking to promote SSCs are multifaceted. For example, improving ICTs is crucial to achieve the urban climate targets of lowering energy use and GHG emissions while boosting socio-economic growth. Although some cities in various geographies claim to have already become “smart and sustainable”, their levels of achievements are uneven. Countries with economies in transition face additional constraints.

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140 Innovation policies are also implicit in the targets specified for SDG 8 on decent jobs, and in achieving SDG 12 on sustainable consumption and production.
UNECE research on innovation policies has identified these barriers to often include low levels of entrepreneurship, insufficient access to stable sources of funding, human capital deficits, and insufficient access to cutting edge technologies and knowledge, among others\textsuperscript{141}.

Another challenge is that, at present, there are no universally agreed standards and indicators that could be used to measure “smart sustainability”. Although innovations in the use of digital technologies can help create life improvements, such as intelligent transport, smart energy systems, resource efficiency, and transparent and open societies, at present there are still no established standards and benchmarks that could generate a more predictable transition towards climate neutrality through the use of novel products, processes, and technologies.

Box 1

Measuring “smart sustainability”

Recently, the UNECE has initiated activities to help Governments and local authorities to tackle these constraints. In cooperation with ITU, it has launched the United for Smart Sustainable Cities (U4SSC) global initiative, which now includes 16 UN agencies and programmes as well as several cities and relevant stakeholders. In 2013, the two organisations started to build indicators to evaluate smart sustainable cities. ITU worked under the framework of the Focus Group on Smart Sustainable Cities and UNECE under the framework of the Committee on Housing and Land Management and its project “United Smart Cities.” The three-year multi-stakeholder negotiations concluded in December 2015 with the endorsement by the ITU and the UNECE Committee on Housing and Land Management of the UNECE-ITU Smart Sustainable Cities Indicators. These indicators formed the basis for the ITU-T Recommendation on Key Performance Indicators (KPIs) on smart sustainable cities to address the achievement of SDGs.

The United for Smart Sustainable Cities (U4SSC) global initiative was launched at the ITU-UNECE Forum “Shaping smarter and more sustainable cities: striving for sustainable development goals”, which took place in Rome in May 2016. By providing a platform that is open to all UN agencies and other relevant stakeholders, U4SSC will advocate public policy projects to encourage the use of ICTs to facilitate and ease the transition to smart sustainable cities. The initiative will produce policy guidance for the integration of ICTs in urban operations based on existing international standards.

A. THE SMART CITIES AGENDA IN KAZAKHSTAN: THE CASE OF ASTANA

The “Smart Astana” concept, support institutions, and activities

Since becoming the capital of Kazakhstan in 1998, Astana is regarded as a modern, innovative city. In order to revamp its sustainable development agenda, the Government has also undertaken reforms to promote sustainable city principles. Smart Astana as a brand has been advertised to represent the capital’s smart and sustainable development aspirations. This goal became an official policy initiative after a Road Map was set up by order of the President (Order No. 01-7.6 of 22 April 2013 “On the need of developing an action plan for including Astana in the list of 50 “smart cities” of the world”). The goal is to improve quality of life and to speed up the modernization of the infrastructure in Astana, as well as to enhance its level of public safety. Since Astana has a population of near 700,000 inhabitants, and a GDP of nearly 1 billion US dollars, the Astana Smart City Roadmap was inspired by other successful cities of relatively

\textsuperscript{141} For more information, see https://www.unece.org/index.php?id=41402#/ (accessed 15 December 2016).
medium size (e.g. Amsterdam in the Netherlands, Boston in the USA, and Oulu in Finland). For instance, the Government has considered the history and institutional framework of these cities for the establishment of innovative business-hubs142.

One key objective of the Astana Smart City Roadmap, which is in line with the national Programme of Progressive Industrial-Innovative Development, is to assist Astana authorities in the introduction of innovations that could create spillovers all over Kazakhstan and contribute to economic diversification143. The basis of the Roadmap relies on the enhancement of a combination of six characteristics that make for a “smart city”: smart economy, smart management, smart life, smart mobility, smart people and smart environment; and it includes policy actions aimed at the complex modernization of the city infrastructure. As a result of the application of the six smart city characteristics, the Government expects to achieve a more centralized, but also more agile and responsive, administration of city infrastructure. Furthermore, progress will also occur in terms of higher quality of life, better housing and utility services, renewed utilities network and increased urban security. Finally, new types of social programmes are envisioned, including more affordable and higher quality education, healthcare and social protection. The project will rely significantly on the establishment of a modern ICT network. This network will serve as the basis for all expected innovations, services and products. Since this is also the most expensive part of the project, it is expected to be undertaken through the attraction of both public and private investments.

One of the key actors involved in the implementation of the Roadmap is a smart city development agency, Astana Innovations JSC, which has been operating since 2011 (Decree of the Akimat of Astana No. 30-48 of 31 May 2011). The company is fully owned by the municipality (or “Akimat”) of Astana, and plays a significant role in coordinating all state mechanisms of support for innovations. Other important players in the field of innovation are the National Academy of Sciences, Nazarbayev University, JSC National Scientific and Technological Holding “Parasat”, and JSC “National Innovation Fund”144.

Since its establishment, Astana Innovations became an engine and catalysing element of the innovative development of the city. According to its management, the work of the agency aims to improve the quality of life of the urban population by increasing the energy efficiency of city services, as well as by developing the innovation potential of small and medium businesses. The main service provided by Astana Innovations is to act as a one-stop-shop for all support mechanisms that exist at the national level (e.g. investment promotion, innovation grants) to help deepen industry-science linkages. Key initiatives that have been undertaken include developing the Smart Astana and Safe City concepts, as well as providing technological business incubation and development, and enhancing the potential of 3D technologies in the capital (see smart Astana projects below).

According to government plans, the process of the development of Smart Astana has three components. The first one took around three years to implement, and focused mainly on improving city management. Actions included strengthening the rationalization of consumption, and using more flexible tariffs for public utilities to encourage savings. The second component is currently being rolled out. It involves adopting new management technologies for selected

142 We build a Smart City, an interview with Yerlan Kozhagapanov, Deputy Mayor of Astana”, Infopanorama, Issue 1(01) (2011), pp.75-77.
143 Furthermore, the Government sector is also undertaking reforms under the “100 Specific Steps National Plan” of 2015, which assigns the objective to make Astana a business, cultural and scientific centre of Eurasia, attracting researchers, students, entrepreneurs and tourists from all over the region.
144 Interview with Mr. Nuraly Bekturganov, Chairman of the Board of Parasat”, Astana Innovations, vol. 1 No. 2 (2012), pp. 68-71; UNECE (2012).
infrastructure development projects (e.g. water and heating supply systems, energy, street lightning and transport). The most difficult and long-lasting stage is the third component. It includes the involvement of city residents as active participants of the smart city. In particular, it means that citizens will become active decision makers on issues such as determining the quantities of heat and electricity they use and the quantity of waste they produce. Overall, it means they will become more conscious of the dangers to the environment of their everyday actions and behaviour.\textsuperscript{145}

In the context of \textit{Smart Astana}, all kinds of research and development (R&D) activities, including marketing, will be supported by “Damu”, the Government Fund for the Development of Entrepreneurship\textsuperscript{146}. The Development Bank of Kazakhstan will also be involved, providing part of the finance. The private sector will be involved through investments in the Special Economic Zone (SEZ) of “Astana New City” (see Box 1). The first industrial park in the SEZ was developed in a rather rapid fashion: as of 2016, it nearly exhausted its resident capacity, counting already 62 resident firms, out of its maximum capacity of 70 firms. One key challenge has been that registration in the Zone was done without much planning and it soon exceeded its capacity to accommodate new firms. The development of another Zone was expected to start in 2017 to accommodate increased demand.

International cooperation on innovation will also be significant. An agreement has been signed with the Fraunhofer Institute of Germany, which will promote the development of high-technology projects. The initiative was launched in 2012 and will help transfer new technologies that could bolster the public infrastructure, such as 3D engineering. This type of cooperation will be instrumental in encouraging more intramural applied research in the business sector of Astana, and Kazakhstan more generally, which is underdeveloped\textsuperscript{147}.

FDI will also play a crucial role. There are significant advantages for foreign investment in innovative activities in Astana. These include a dynamic financial sector, an expanding IT, knowledge intensive activities, the availability of adequate infrastructure to introduce smart technologies at the city level, the emergence of some clusters in the medical, scientific and educational sectors, and a favourable tax and investment environment. The division on Investment Promotion of Astana Innovations foresees that, thanks to a series of measures to be undertaken to improve the investment climate, it is expected that the city will attract FDI worth USD 200 billion within a 10-year period\textsuperscript{148}.

In addition to Expo 2017, which will focus on sustainable energy solutions, other significant investment promotion initiatives will also encourage innovation. These include plans to establish an international financial centre “Astana”, which has the potential to become a financial hub for Central Asia, the Caucasus, Eurasian Economic Union, the Middle East, West China, Mongolia and Europe\textsuperscript{149}; the deepening of aftercare services with firms in the SEZ “Astana New City”; and the development of further service support for investors.

\textsuperscript{145} “Astana Smart City”, \textit{Infopanorama}, vol. 1, No. 1 (2011), pp 80-81.
\textsuperscript{148} Recent measures include the provision of incentives for large projects, simplification of the process of hiring foreign personnel, tax exemptions from corporate income, land and property tax for up to 10 years in some cases, subsidies for up to 30 per cent of the actual costs of construction and assembly works and purchase of equipment; new guarantees for investors with regards to tax stability and employment legislation; and the introduction of the figure of the Investment Ombudsman, amongst others. (Source: Kairat Karmanov, “Investment Attractiveness of Astana: Components”, \textit{Smart Astana}, No.3 (December 2015), pp. 54-60.
\textsuperscript{149} For more information, see website of Astana International Financial Centre. Available from http://www.aifc.kz/
Box 2
Industrial parks in the Astana New City SEZ

The industrial park of Astana New City is located in an area of 598.1 hectares (ha) within the Astana city district. Its public infrastructure was built up through government funded investments. As of 2015, 62 projects worth USD 1.124 billion have been implemented. Amongst these, 11 projects are foreign owned. Since its inception in 2006, a total of 96 firms have been registered, of which 21 are already operational. The total value of manufactured products amounted to about USD 1.9 billion in 2015.

Municipal authorities are interested in further attracting leading transnational corporations and other investors in order to foster the transfer of technology and knowledge spillovers. Major global transnational corporations (TNCS) that have been involved through investments, both in infrastructure and in priority economic sectors, undertook activities in the production of electric locomotives (Alstom, France), train coaches (Talgo, Spain), diesel locomotives (General Electric, USA) and helicopters (Eurocopter, Germany and France: through a joint venture with domestic partner Kazakhstan engineering).

Companies located in the territory of the Astana New City SEZ are exempt from the following taxation: income tax, land tax and value added tax (VAT). An additional benefit is that tariffs for public utilities are lower compared to other regions: examples include water (water and sewerage rate is $1.3 per cubic meter), electricity (USD 0.09 per kW), and heating (USD 7.9 per Gcal). These benefits apply both to local and foreign investors.

Because of the rapid growth and continued interest of industrial enterprises, the city administration decided to build a new industrial park in an area of 433.1 ha, adjacent to the territory of the existing industrial park. Jurong Consultants, a subsidiary company of Singaporean Jurong International, has been involved into the development of the second industrial park master plan.

Source: Astana Innovations and Astana Invest Forum 2015

Finally, it should be highlighted that the further enhancement of infrastructure in Astana and the deployment of smart city technologies and services will require large financial investments. In a context where the Kazakhstani economy has been negatively affected by a number of external factors (i.e. economic crises in trade partners in the Eurasian Economic Union (EAEU), the decline of world commodity prices), it is unlikely that national and municipal budgets for such investments could keep up with demand. Authorities have highlighted mechanisms such as public-private partnerships (PPP) to make up for shortfalls in public spending that may occur. PPPs are an alternative to public procurement for both building new and upgrading existing infrastructure. Their success depends on finding the right balance of responsibilities and risks to be borne between government and private actors. In order for such initiatives to succeed, it is also necessary to work out sectorial legal and other measures to encourage private investments in priority sectors of the economy.

With this goal in mind, a new Law on PPPs was enacted in 2015, which is based on international best practice experiences, including new concepts and mechanisms for various PPP implementation schemes. These mechanisms could provide for the private capital with an opportunity for stable revenue from infrastructure investments with low risk as compared to commercial projects, including smart projects. For instance, investments in modern roads that include highly intelligent systems integrating the modern technology of flow control and traffic
safety could involve funding through PPPs. Similar systems could be implemented in the urban environment (e.g. smart traffic lights, intelligent security systems).

**B. INNOVATIVE PRODUCTS AND SERVICES OF SELECTED SMART ASTANA PROJECTS**

**Pilot projects**

As of 2016, Astana Innovations has implemented four Smart City pilot projects, with support of the municipality of Astana, which totalled public investments of about USD 10 million. These are the following: Smart Polyclinic, Smart School, Smart Street Lighting and Smart Payments. It is expected that each of these projects will be replicated upon their completion in other city locations.

**Smart Healthcare**

The Smart Polyclinic project has been launched with the goal of modernizing the healthcare facilities of Astana and improving the quality of medical services in the city. The project is currently being implemented in pilot mode in City Polyclinic No. 4. In the long term, the objective is to improve the operation of the healthcare industry across the board by means of enhancing the automation of internal and external processes.

One of the problems with health facilities in Astana is that they involve long waiting times and queues for doctor visits. Finding a solution to this challenge has been one of the main objectives of the project. For instance, innovative solutions have allowed for doctor appointments to be arranged either through a terminal or else online at the polyclinic’s website, which helped minimize queuing times by 10 per cent. In addition, the system also offers the opportunity to save time through the digitalization of health information, thus reducing time needed for the entry of patient records. Finally, it is expected that the introduction of analytical systems will help improve the coordination and performance of all departments of the polyclinic. Such systems will support medical, accounting, financial and laboratory activities in the institution.

Another constraint that has been tackled by the “Smart Polyclinic” project was diagnostics. Since the project was introduced, it has enabled the more efficient work of doctors by providing them with medical instruments that contain all the necessary elements for making right diagnostics decisions. In the future, it is expected that productivity of the clinics’ laboratories will increase significantly after a unified database of research results is created. This will imply integrating all medical laboratory information records into the earlier existing informational systems of medical and preventive treatment facilities, which will provide access to test results for all doctors treating the same patient. For this purpose, a Medicine Information System (MIS) has been set up that is closely linked to the register of the Ministry of Health and Social Development. The system allows the automatic checking of a patient’s registration at a particular polyclinic. In addition, the system reduces the use of paper-based patient records that need to be filled in by hand. In total, over 600 standard forms of medical examination protocols have been introduced so far.

As of 2015, 8,735 patients were provided with services through the MIS in the City Polyclinic No.4; more than 700 people have used the new terminal and online appointment service; and 363 employees of the Polyclinic have been trained to work in the system. According to preliminary estimates, a successful scaling up of this project could save about KZT 600 million
of the city budget. In the autumn of 2015, the project was presented to the delegates of the VI International Investment Forum “Astana Invest 2015” at the Smart Astana exhibition hall. It is expected that the further development of the project will significantly improve interaction between healthcare organizations and Astana citizens. In particular, significant results can be expected in the form of shorter queues and waiting lists; the reduction of medical prescription errors; and the improvement of accuracy, efficiency and informational content of diagnostic research.

**Smart schools**

The goal of this project is to increase the automation of education-related processes in two Astana schools (No. 3 and No. 5). Paramount among its objectives is the prevention of access of unauthorized persons to the schools’ buildings; the prevention of emergency situations; improved student welfare by enhancing the efficiency of the service in school canteens; and the better monitoring of student expenditure by parents. The project will also make the use of the library more attractive, as well as increase safety and security with the use of video surveillance and access control systems. In each of these spheres, the project involves the introduction of innovative technologies in the everyday management of schools, including the following:

- **ACMS (Access Control and Management System):** enhances the control of access to the school building through the use of SMS notifications to parents’ cell-phones that register student attendance;
- **video surveillance:** includes certain functions to enhance security in the classroom, including monitoring in real time, manual/automatic recording, and playback and storage of video information;
- **e-canteen:** introduction of electronic payment in canteen. Allows parents and students to better monitor spending by registering transactions in a personal account;
- **e-library:** involves the rolling out of an electronic database of books and software for quick searches of entries in the library collection. In addition, the project involves the distribution of electronic reader cards, which will allow for faster processing of book requests.
- **personal account:** the setting up of students’ personal accounts will allow parents to oversee statistics on attendance and compliance with class schedules, as well as setting a tracking system for monitoring the use of library resources and expenditure statistics in the school canteen.

**Smart street lighting**

The goal of this project is to reduce energy consumption and street lighting operating expenses. Among its objectives, it is expected to obtain energy savings of up to 48 per cent because of the improved use of technology; an additional energy saving of 13.6 per cent due to automatic dimming; and a significant reduction in expenses regarding maintenance and inspections. The latter is achieved given that the system will allow for the transfer of light usage and lamps’ condition information, through IT, to a central managing and monitoring unit, where an operator will be able to visualize information displayed on the monitor of his or her office computer. Statistical data have already proved the project’s effectiveness. As of 27 November

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150 “Smart Polyclinic: comfort, high quality, promptness”, *Smart Astana*, No.3 (December 2015), p. 62.
2015, since the beginning of the project implementation, electricity consumption has reduced from 22,950.8 kW (KZT 390,852) in 2014 to 10,229.5 kW (KZT 174,208). Thus, the project has saved 12,721.3 kW or KZT 216,644.  

A pilot street was selected to begin the project implementation (Enbekshiller, located in the Yessil district of Astana). The system of lighting in this street has been refurbished, providing for a more flexible configuration of operating modes that increased energy efficiency. The manager is able to set the schedule of turning on/off lighting (which can also be programmed to occur automatically). The operator can thus determine the schedules for lamp usage according to the availability of natural light. Notably, the dimming function provides control over light consumption and ensures a better management of lighting equipment. Communication is provided by means of both wireless (radio, GSM) and wired technologies (PLC). It is expected that the “Smart street lighting” will be one of the key projects of the EXPO-2017 international specialized exhibition.

This project also builds on Kazakhstan’s national strategy on efficient lighting, which has been set up to implement Law 541-IV of 2012 on Energy Saving and Energy Efficiency. The strategy promotes the use of light-emitting diode (LED) lamps by introducing a phase-in ban on the use of incandescent lamps. Some specific measures include the following: (i) upgrade of indoor lighting in public buildings; (ii) upgrade of street lighting in towns and settlements; (iii) proposals for energy-efficient labelling for lighting products; (iv) demonstration projects on energy-efficient lighting; (v) proposals for amending construction standards for lighting; (vi) a proposal for setting limits on production and sale of mercury containing lamps; (vii) upgrade of electric lighting and power supply systems in multi-apartment buildings; and (viii) utilization of mercury containing lamps.

Smart payments

This project involves the provision of payment of utility services in electronic format. The system allows for payments in electronic format of bills for water supply, water disposal, gas supply, municipal waste disposal, residential expenses, and electricity, heating and telecommunication services. The system of personal accounts also keeps records of the payment history of residents in line with Law No. 94-V of 21 May 2013 on Personal Data and Its Protection. In order to input payments, an “electronic wallet” can be replenished via payment terminals and bankcards.

The project’s goal is the creation of a single account for all consumer utility payments. In the long term, the rolling out of all stages of this project will contribute to a “one-stop-window” that provides an opportunity to efficiently perform all city payments at one place, avoiding the need to visit several organizations. The project relies on an Internet portal that allows users to create an account and pay for city expenditures, such as administrative fines, taxes, electronic tickets for public transport, parking tickets, and polyclinic services, as well as to make contributions for school lunches of children.

151 “Smart Potential of Astana”, Smart Astana, No.3 (December 2015), p. 45.
152 The software provides the opportunity to dim each lamp separately or as a selected group of lamps.
153 The project will also benefit from innovative development at the industrial park, where “Parasat” Holding established a joint venture with LLP “Led System” through a PPP mechanism for the manufacturing of LED products.
154 Because favourable price changes for LED lamps have made such a strategy cost efficient, and given challenges related to disposal of mercury containing lamps, the Government has put in place Program 2020, which proposes to replace incandescent lamps with LED lamps.
**Other projects**

In addition to the four pilot projects, a series of other initiatives have been envisioned that will be rolled out in the future through partnerships between the municipality and private investors, including the following:

- **Enhancing the ICT Infrastructure**

  Astana Innovations will implement a series of projects aimed at strengthening the city’s ICT infrastructure for the benefit of residents and the business sector. With the accelerated growth in the use of smartphones and tablets, urban residents have a real need for high-speed mobile Internet anywhere. Thus, one key initiative concerns expanding the coverage of free wi-fi urban locations. The “Open Wi-Fi” project was first designed in 2011. Its components involved strengthening the ICT infrastructure of Astana by creating a city network of hotspots that provide open access to the Internet. The project has been undertaken with the cooperation of “The One Capital” company, a partner of Astana Innovations. As of 2016, the project has provided free wi-fi access in 24 public places in Astana, including public monuments, parks, public transportation terminals, restaurants and shopping malls\(^\text{156}\).

  One outcome of this project has been that over 15,000 people a day now use free Internet in public places during working days, according to city authorities. In addition, the initiative has had an impact on the attitude of local entrepreneurs, who felt encouraged to extend the free provision of wi-fi services to their clients\(^\text{157}\). Results of monitoring by Astana Innovations show that, as of 2016, all major public institutions of Astana (shopping centres, hotels, restaurants, cafes, sports facilities, libraries) provide clients with free Internet because they consider it a tool to increase their competitiveness.

- **Intelligent Contact Centre Astana**

  Intelligent Contact Centre is a unit of the larger Complex Life Support System of Astana (CLSS). The goal of this project is to provide residents with efficient communication between the administrators of city services and related institutions. The Centre will perform professional processing of incoming requests received by the city services providers (e.g. Akimat units, emergency and dispatching services, among others). Once fully implemented, the system will allow for the centralization of all service requests from citizens; expand methods of informing the population about city services; provide receipt of requests through different channels (i.e. phone, email, website and social network); provide high-quality and fast processing of all types of requests; and keep a record of statistics on the provision of city services.

- **Unified Resident Card**

  This project will enable the full coordination of all *Smart Astana* projects. Among other objectives, it will allow citizens to pay for bus tickets electronically; request appointments and access waiting lists at polyclinics; and enable students to use plastic cards to carry out such activities as entering school facilities through turnstiles and pay for lunches in the canteen. The goal is that, after full-scale implementation of each of the *Smart Astana* projects discussed, residents and visitors of the city will be able to request and receive a plastic card for the payment of all smart services. The “Unified Resident Card” will contain personal information of the card holder (e.g. full name, unique identification number, current monetary balance of electronic wallet). Replenishment of the electronic wallet will be possible through the Internet portal or payment terminals.


\(^{157}\) Ibid.
The introduction of the Card will be gradual. Initially, they will be granted to representatives of vulnerable social groups, schoolchildren and university students. In the longer term, they will be available for all residents and guests of the capital.

C. SMART CITIES AND THE SUSTAINABLE DEVELOPMENT AGENDA: IMPLICATIONS FOR ASTANA CITY AUTHORITIES

The potential for cities to become smarter and more sustainable will likely increase over time. The number of innovation activities by resident start-up companies has been increasing in many cities around the world, regardless of their population and size. During recent years, cloud computing, open software and hardware, social networks, and global payment platforms, among other things, have made it easier to create start-ups with fewer physical resources and personnel. The availability of new technologies lowers the cost of innovation and permits entrepreneurs to take scale and other advantages from agglomerations. Thus, these trends have let businesses take advantage of city agglomeration effects to a greater extent than only a few years ago.158

A research programme by the Economist Intelligence Unit (EIU) has shed light on some of the key agendas for the future of smart cities, which include both aspects of improving the use of technologies in city planning and enhancing transparency and public participation. The programme brings together the views of citizens, businesses, government leaders and experts. In May 2016, the EIU conducted a survey of 1,950 citizens and 615 business executives in 12 cities: Barcelona, Berlin, Buenos Aires, Chicago, London, Los Angeles, Mexico City, New York City, Rio de Janeiro, Shanghai, Singapore and Toronto, the findings of which have provided useful feedback to policy makers.159

For instance, survey information has provided a list where future avenues for smart innovations are more promising, which include the following:

- the improvement to quality and affordability of social services (e.g. education and healthcare);
- reduced traffic congestion;
- faster access to city services and more transparency (e.g. e-government);
- crime reduction and improved emergency services;
- improved commuter networks;
- improved delivery of utilities such as water and electricity;
- improved waste management services, reduced pollution, energy consumption and other improvements in environmental sustainability;
- vibrant city life and leisure activities (commerce, festivals, public spaces).


With regards to the functional areas where digital technologies have impacted city life, survey information shows that both citizens and business representatives point to telecommunication services (36 per cent) as the most important area that was transformed through recent innovations. It is followed in ranking by transportation; emergency and crime prevention; e-government; and social services. Other areas that were not highlighted by recent experiences but were still deemed promising for transformation in the near future include pollution reduction and environmental sustainability. Overall, the EIU analysis highlights that the surveyed cities are facing similar challenges regardless of the different levels of economic development, which points to the fact that application of digital technologies can generate significant improvements for the welfare of urban dwellers anywhere.

When contrasting the experience of Astana with that of cities in other countries reflected in the EIU study, it can be suggested that much of what has been taking place in Kazakhstan’s capital city is in line with global trends. Looking forward, there is still much potential for Astana to develop further applications that rely on data provided by citizens. Whereas the pilot and other projects promoted by Astana Innovations seem to constitute a solid base to build new projects, the experiences of other cities also point to alternative policy paths that could further strengthen both private sector involvement and public engagement.

With regards to the incorporation of sustainable development priorities in the agendas of municipal authorities in line with the adoption of Agenda 2030, there is much room for government action, as well as private led investment, to undertake new projects that could ensure both increasing economic returns and the achievement of public objectives. Recent examples of smart uses of new technologies – IT in particular – point to the importance of innovations that help gather, store and manage data on aspects of urban life, in areas ranging from traffic and land-use planning to pollution and crime. Also, the innovative use of digital technology can improve city safety structures at times of natural disasters (see Box 3).

**Box 3**

**Success stories regarding the smart use of digital technologies that foster sustainable development**

**USA:** In Boston, dwellers can use smartphones to record road defects through the “Street Bump” application. The GPS location is uploaded to a server for analysis, and this data helps municipal authorities to monitor potholes and other road issues. It also helps set priorities regarding decisions about investments in the road network. The application was developed by the Mayor’s Office of New Urban Mechanics. In Pittsburgh, the MyBurgh application allows citizens to log service requests through cell phones and consult government press releases, including through social media interaction.

**Spain:** IT applications have been used to monitor the performance of procurement for the maintenance of public assets (e.g. parks and roads). In Madrid, work has been undertaken with IBM to develop a platform that aggregates data from invoices and other sources, including reviews by citizens, to assess the performance of suppliers. Pay rates for contracts have been tied to performance in order to enhance efficiency. In Barcelona, wireless sensors have been utilized to collect data on environmentally significant variables (e.g. temperature, air quality, pedestrian traffic, waste recycling), with information accessible to citizens through smartphone applications.
Poland: Until recently, Warsaw had no motorway system and just one metro line, and the relatively dense railway network was underused. During the last decade, the development of the city’s transport network, including intensive expansion of the metro, has stimulated urban development and promoted wiser use of urban spaces. As part of this process, the city authorities have explored low-emission technologies (e.g. alternative fuel power was used in the entire urban bus fleet). Other innovations included the implementation of a single ticket system for all modes of transport, and an intelligent traffic management system.

Indonesia: In 2015, PetaJakarta, an online open-source platform, was developed. The application allows collecting information about flooding in the country’s capital city, Jakarta. The software crowdsources information on flooding inputted by residents, so that city emergency authorities can promptly react. The application works through geo-location technology, which gathers users’ reports posted on Twitter, and adds each report to an open-source map.

Source: Astana Innovations and Astana Invest Forum 2015.

Conclusions on the Achievements, Opportunities and Challenges for Astana to Become a Model of Smart and Sustainable City

Over recent years, a dichotomy can be observed among municipalities promoting smart innovations between those who are investing in IT infrastructure and data collection devices on the one hand, and those who have emphasized the development of human capital resources of residents through investments in knowledge generation and opportunities for public participation. Each of the two groups have been interpreted as representing, respectively, a “hard” versus “soft” approach to developing smart cities. Whereas the hard approach focuses on infrastructure refurbishing and setting-up selected urban sensors that gather information, the second group focuses on the level of education of the people and identifying incentives and other determinants that encourage them to participate and innovate. It should be highlighted that both types of interventions can benefit from proper planning, inter-ministerial coordination, and PPPs.

In the case of Astana, although existing projects put an emphasis on the “hard” approach, the need to increase public engagement has already been acknowledged as a priority for one of the components of the Smart Astana initiative. The two types of intervention may face significant constraints; therefore, a list of policy challenges needs to be considered by national and local authorities of aspiring cities that wish to embrace smart innovations concerning policy implementation. Regarding the short to medium term, the following is a summary of the crucial subject areas:

- The need for improved coordination between national and municipal innovation policies.

If city administrations are provided more resources to tackle the most pressing sustainable development challenges, there will be more need for coordination between existing capacities at the local level, and policies and strategies of national governments addressing the same areas. Firstly, support by national authorities is crucial with regards to the setting up of technology standards and best practices. Higher levels of government are also relevant to sanction legislation that promotes a transparent business environment. Whereas national authorities play

crucial coordinating roles, these need to be complemented by the need for more practical and locally customized solutions that directly affect people’s needs at the city level. Thus, further collaborations between city and national authorities in the design of “smart” development strategies should be encouraged. This collaboration should be based on the clear distribution of roles and responsibilities of different authorities (i.e. avoiding overlaps and improving communication). Such closer collaboration between different authorities will create synergies, and enable funding of integrative initiatives by local and national authorities.

- **The need for improved transparency in legal frameworks and privacy protection.**

It is likely that, progressively, smart applications will involve the generation, storage and use of newly generated information that may affect citizens’ rights. Thus, it is important that municipal authorities in Astana engage the national Government in creating a suitable legislative environment that promotes the disclosure of data while guaranteeing appropriate levels of privacy. Crucial examples of what needs to be legislated include how cities may obtain energy use data from utilities, or how medical records may be shared to create more effective, systemic health-care solutions that involve emergency responders, social support of civic organizations, hospitals, health insurers, and other actors.\(^{162}\)

- **The need to enhance citizen participation.**

Social media and other forms of crowdsourcing have increasingly given stakeholders the opportunity to provide feedback on city services and infrastructure. Thus, there is a potential for digital technologies to offer ample opportunities to democratize decision making at the city level. For instance, technology has the potential to channel increased citizen participation and to enable elected officials to solicit far greater input on decisions than would be possible by scheduling public hearings or other traditional means. If government officials accompany these trends with policy reforms, this will add another layer of grassroots participation in a city’s innovation ecosystem.\(^{163}\) Astana authorities could learn from examples of successful participatory experiences both online (e.g. applications and platforms) and offline (e.g. laboratories and innovation spaces) gathered by the European Innovation Partnership on Smart Cities and Communities (EIP-SCC).\(^{164}\)

- **The need to engage in national and international networks of learning.**

Enriching local innovation ecosystems by linking to global networks of academia, businesses and civil society organizations is critical to ensuring continuous learning and the transfer of technology. Such networks may also be of help in recruiting and retaining a workforce that shares common values about improving urban life, and thus boost a city’s scarce technical skills. Examples of peer-to-peer collaborative models between cities and other institutions that have addressed significant sustainable development challenges (e.g. monitoring GHG emissions and combatting climate change, promoting innovation amongst disadvantaged

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\(^{163}\) The results of the EIU survey in some large cities reveal there is certain room for improvement. Few respondents say they feel able to have an impact on smart city projects (15%) or improvements in energy and water services (9%), while one in four executives (the largest group) feel that their company cannot participate effectively in urban improvements. See Economist Intelligence Unit (2016). *Empowering cities: The real story of how citizens and businesses are driving smart cities*.\(^{164}\)

groups, matchmaking between research centres and city authorities) already exist. Astana authorities could consider engaging in such types of initiatives. To increase the chances of success, it would also be important for them to create technological platforms that promote network effects between cities and other regions of the country.

- The need for smart calibration in the building of new infrastructure through the involvement of private and public actors.

The transition towards smart cities creates both challenges and opportunities for interaction between public and private interests, including through PPPs. Successful PPPs have already been undertaken to promote smart and sustainable projects. For instance, in Australia, PwC (a business management consultancy) recently assisted the transportation authority in Sydney in the creation of a community of smartphone application developers. In the future, Astana authorities can expect both local and foreign investors to become interested in partnering with them to develop its smart infrastructure. In this regard, the recent launching of the Astainable initiative, in cooperation with the Government of France, will offer numerous opportunities for French firms to undertake smart and sustainable development friendly projects in infrastructure, including eco-mobility, energy expertise, responsible water and waste management, sustainable construction, digital and information technologies, and farming and nature in urban environments.

Concerning the undertaking of PPPs, the UNECE has been at the forefront of discussions on how to best adopt best practices in the creation of infrastructure, that could bolster innovation and sustainability at the urban level. Notably, in 2015, a Centre of Excellence was established in Barcelona, Spain, that was sponsored by the local City Hall (see Box 3). Considering the variety of projects envisioned in the Astana Smart Concept, engaging with the programme of activities of the Centre could offer significant learning opportunities to Astana authorities in the future.

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165 Global initiatives such as “C40 Cities” and the “Compact of Mayors” have helped standardize the accounting of GHG emissions in cities; and promote innovations and collaborations to combat climate change. In the United States, the “My Brother’s Keeper” initiative by the White House seeks to create a network of cities that addresses issues related to disadvantaged youth. The MetroLab network, launched in 2015 as part of the White House’s Smart Cities Initiative, helps form partnerships between research institutions and city governments to develop practical solutions using ideas and technologies from scientific practice. See Bettencourt, Luis M.A. and Gonzales, Javier (2016).

166 Top software application developers participated in a competition to present applications for city bus passengers, and winning teams were offered access to geo-location data of buses and support in advertising through the Transportation for NSW. This initiative allowed software firms to assist in the development of smart infrastructure, improving the welfare of passengers who can now better plan their trips. See Nartaev, A. (2015).

167 A contract by the French Government was awarded to a consortium led by Eiffage in partnership with EGIS, ENGIE, Poma, Suez Environnement, Enodo and PGA. The consortium’s role is to promote French excellence in the various “bricks” that make up a sustainable city. For more information, see website of Eiffage - http://www.eiffage.com/en/home/developpement-durable/astainable.html (accessed 10 December 2016).
Annex 1. Cold water supply rates (as of September 2016)

<table>
<thead>
<tr>
<th>No.</th>
<th>Region</th>
<th>Consumer groups</th>
<th>Rates, tenge/m³</th>
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<td>Legal entities and population without individual metering devices</td>
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*Source: The Committee on Regulation of Natural Monopolies and Protection of Competition under the Ministry of National Economy of the Republic of Kazakhstan.*
Annex 2.

Specific heat consumption in buildings (multi-apartment buildings) in Astana regarding the Energy Efficiency Class as per SN RK 2.04.04-2011 “Buildings Heat Insulation”

<table>
<thead>
<tr>
<th>Multi-apartment buildings</th>
<th>Rated specific thermal characteristics of heat consumption, W/m²°C</th>
<th>Averaged rate of heat consumption, kWh/m² per annum</th>
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<tbody>
<tr>
<td></td>
<td>Class A++</td>
<td>Class A+</td>
</tr>
<tr>
<td></td>
<td>from -60,1% to -60%</td>
<td>from -50,1% to -50%</td>
</tr>
<tr>
<td>Floor 1</td>
<td>0,455</td>
<td>185</td>
</tr>
<tr>
<td>Floor 2</td>
<td>0,414</td>
<td>169</td>
</tr>
<tr>
<td>Floor 3</td>
<td>0,372</td>
<td>152</td>
</tr>
<tr>
<td>Floors 4,5</td>
<td>0,359</td>
<td>146</td>
</tr>
<tr>
<td>Floors 6,7</td>
<td>0,336</td>
<td>137</td>
</tr>
<tr>
<td>Floors 8,9</td>
<td>0,319</td>
<td>130</td>
</tr>
<tr>
<td>Floors 10,11</td>
<td>0,301</td>
<td>123</td>
</tr>
<tr>
<td>Floor 12 and higher</td>
<td>0,29</td>
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</table>
Specific heat consumption in buildings (multi-apartment buildings) in Almaty regarding the Energy Efficiency Class as per SN RK 2.04.04-2011 “Buildings Heat Insulation”

<table>
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<tr>
<th>Multi-apartment buildings</th>
<th>Rated specific thermal characteristics of heat consumption, W/m²°C</th>
<th>Averaged rate of heat consumption, kWh/m² per annum</th>
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<tbody>
<tr>
<td></td>
<td>Class A++ from -60,1% to -60%</td>
<td>Class A+ from -50,1% to -50%</td>
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<tr>
<td>Floor 1</td>
<td>0,455</td>
<td>107</td>
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<tr>
<td>Floor 2</td>
<td>0,414</td>
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<tr>
<td>Floor 3</td>
<td>0,372</td>
<td>88</td>
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<tr>
<td>Floors 4,5</td>
<td>0,359</td>
<td>85</td>
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<tr>
<td>Floors 6,7</td>
<td>0,336</td>
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<tr>
<td>Floors 8,9</td>
<td>0,319</td>
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<tr>
<td>Floors 10,11</td>
<td>0,301</td>
<td>71</td>
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<tr>
<td>Floor 12 and higher</td>
<td>0,29</td>
<td>68</td>
</tr>
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</table>
Specific heat consumption in buildings (multi-apartment buildings) in Karagandy regarding the Energy Efficiency Class as per SN RK 2.04.04-2011 “Buildings Heat Insulation”

<table>
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<tr>
<th>Multi-apartment buildings</th>
<th>Rated specific thermal characteristics of heat consumption, W/m²°C</th>
<th>Averaged rate of heat consumption, kWh/m² per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class A++ to -60,1%</td>
<td>Class A+ to -60%</td>
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<tr>
<td>Floor 1</td>
<td>0,455</td>
<td>176</td>
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<tr>
<td>Floor 2</td>
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<td>Floor 3</td>
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<td>Floors 4,5</td>
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<td>Floors 10,11</td>
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</tr>
<tr>
<td>Floor 12 and higher</td>
<td>0,29</td>
<td>112</td>
</tr>
</tbody>
</table>

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Interview with Mr. Nuraly Bekturganov, Chairman of the Board of Parasat (2012). *Astana Innovations*, vol. 1, No. 2, pp. 68-71.


Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy


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**Websites:**


Monitoring of the economy of Kazakhstan. Web http://ranking.kz


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