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 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

most households. 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".²

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.

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.