UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

UNECE

FORECASTING SUSTAINABLE URBANIZATION:
SUPPORT FOR SUSTAINABLE INFRASTRUCTURE PLANNING IN CITIES

Inception and Data Collection Workshop

20-21 February 2020
Plaza Hotel
Bishkek, Kyrgyzstan

Draft CONCEPT NOTE and Tentative PROGRAMME

Background

The Asia-Pacific region is among the most rapidly urbanizing in the world. Its urban population increased by over 725 million people between 2000 and 2015 and is estimated to increase by another 688 million by 2030. The manner in which cities develop is vital for countries to achieve the 2030 Agenda for Sustainable Development and to realize their Nationally Determined Contributions (NDCs) to reduce greenhouse gas (GHG) emissions under the Paris Climate Agreement.

While many cities in the region have seen considerable economic and social development, urban planning has lagged, and infrastructure development has not kept pace. This may threaten the region's continued growth, and potentially prompt regression away from the SDG targets. Local policymakers often lack not only the capacity to gather and utilize information and data, but also the tools to understand longer term impacts of urbanization and growth, limiting the ability to properly plan and implement urban solutions that would ensure future cities are resilient and resource efficient. Additionally, long-term financing and investment needs are often uncertain due to a lack of robust forecasting of required infrastructure and resource needs. As a result, cities are likely to continue to experience urban sprawl, over-consumption or inefficient use and management of resources, severe environmental impacts and natural resource scarcities, increased inequalities, and a lack of access to services for both residents and industries.

In North and Central Asia, landlocked developing countries such as Kyrgyzstan face even more challenges to manage urban growth amidst rapid GDP growth, which will accelerate resource consumption and carbon emissions. The average annual urbanization rates are expected to double between 2015 and 2030[1] while projected annual real growth in GDP currently exceeds 4%.[2] This growth is already resulting in exponentially high resource intensities with Kyrgyzstan's material resource intensity in 2016 far exceeding subregional and regional averages.[3] Kyrgyzstan's material resource intensity of 7.9 kg/US$ is nearly four times the ESCAP regional average of 2 kg/US$. These trends are similar for energy and water intensity: Kyrgyzstan's energy intensity (measured in kg of oil equivalent per 1000 US$ GDP) is 206.4 compared to the ESCAP average of 133.6 and water intensity (measured in m^3 per US$) in Kyrgyzstan is even more extreme, exceeding by twenty times the ESCAP and subregional averages.[4] Better understanding

[1] Kyrgyzstan annual urbanization rate increases from 0.59 in 2015-2020 to 1.18 in 2025-2030. Source: 2018 Revision of the World Urbanization Prospects, Population Division of the United Nations Department of Economic and Social Affairs (UN DESA), available at: https://www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html
[2] Average projected real GDP growth (2018-2023), from World Economic Outlook, 2018, available at: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD
[3] http://data.unescap.org/escap_stat/
[4] Water intensity (in in m^3 per US$): the ESCAP average is 0.11, the average for the North and Central Asia subregion is 0.11, and in Kyrgyzstan it is 2.

of these trends and future resource demands from urbanization will provide opportunities to reduce these extreme resource intensities.

Workshop Objectives

The aim of this workshop is to discuss the challenges to and opportunities for achieving sustainable urban development in the city of Bishkek, especially in relation to the sustainable management of resources. The workshop is organized jointly by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Economic Commission for Europe (UNECE). The workshop will have approximately 25 participants, including representatives from national Ministries, national urban policymakers, local officials from Bishkek, and academia. The objectives of the workshops are:

1. To explore challenges in the implementation of the 2030 Agenda for Sustainable Development, especially SDG11 to 'Make cities and human settlements inclusive, safe, resilient and sustainable', and review SDG11-related objectives and targets in Bishkek.
2. To broaden understanding of the relationship between urbanization and resource consumption, and to review the existing information and the policy environment of urbanization (including national and city-level development and economic growth plans), resource flows, and environmental trends in Bishkek.
3. To collect data to support a baseline analysis and projections for resource use to develop business-as-usual projections of resource consumption and resource intensities in Bishkek based on population and GDP estimates to 2025 and 2030, and develop a project plan to support the project's implementation in Bishkek.

Expected Outcomes

1. Participants gain a better understanding on how to measure progress in realization of the 2030 Agenda, especially in relation to SDG11, at the local level and how to organize and finance urban development that is sustainable and socially inclusive.
2. Participants gain a deeper understanding of the urbanization and resource consumption trends in Bishkek, and how robust forecasting can support more sustainable infrastructure planning. Participants also have an increased awareness of the need to institutionalize disaggregated data collection for the assessment of differentiated environmental impacts and to support reporting for the SDGs and NDCs.
3. Relevant data sources are identified, a data collection plan is developed, and a data collection protocol is established to support the baseline analysis and projections for resource use, and an overall project plan is developed and Working Group established to support the implementation of the Forecasting project.

Project Information:

Forecasting Sustainable Urbanization

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) proposes to assist three partner cities, Bishkek in Kyrgyzstan, Dushanbe in Tajikistan, and Xiamen city in China, to better plan sustainable infrastructure and manage urban growth by developing and applying a forecasting methodology and tool.

Altering future trajectories in these cities will require a decoupling of economic growth from resource consumption and a drastic reduction in resource intensities associated with urbanization. Through application of the tool, the project focus is to support cities to generate robust forecasts and develop future scenarios which will identify resource-efficient development pathways. The scenarios will demonstrate cost and resource savings that can be achieved over a long-term period well beyond the project duration, and enable the partner cities to conduct infrastructure planning to create more resilient, resource-efficient, and sustainable cities, including through nature-based solutions and adoption of environmental policies for sustainable management of resources.

Through this project, ESCAP intends to support Bishkek to develop measures to reduce the increase in natural resource depletion resulting from unplanned and/or unmanaged urbanization. Altering these trends requires robust analysis of existing data and metrics and a means to forecast resource needs, investments, and the potential for policy interventions and technical solutions. The resulting tools and methodologies would then have the potential to be replicated and scaled-up throughout the Asia-Pacific region. The purpose of this city-level workshop in Bishkek is to introduce the project and collect data to support the baseline analysis and the development of the forecasting tool.

Evidence-based policies for sustainable housing and urban development in selected countries with economies in transition

Limited access of the population to affordable, healthy and energy-efficient housing and inclusive, safe, resilient and sustainable cities is induced by, among others, the insufficient capacity of national governments to develop and implement evidence-based housing and urban development policies. The project aim is to strengthen national capacities for the development of evidence-based policies for sustainable housing and urban development in six selected countries: Albania, Georgia, Kyrgyzstan, Belarus, Kazakhstan and Ukraine.

The project will assist national governments in the selected beneficiary countries by elaborating a policy paper and guidelines for the collection and analysis of the national data on housing and urban development, providing advice on the development of evidence-based policies, promoting intersectoral cooperation and building capacity on sustainable housing through the provision of advisory services, training materials, organization of workshops and online trainings. The main organizations involved in project implementation are UNECE (lead agency) and UN-Habitat (an implementing partner).

The project will support achieving Sustainable Development Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable”. It builds on the current efforts of the UNECE and UN-Habitat to establish evidence based policies through the country profiles on housing and land management, the organization of the monitoring of the implementation of the Strategy for Sustainable Housing and Land Management in the UNECE region for the period of 2014-2020 (ECE/HBP/2013/3), the Geneva UN Charter on Sustainable Housing, and the UN-Habitat Global Housing Strategy.

The workshop will include sessions that (i) highlight the role of the UNECE/ITU Key Performance Indicators for Smart Sustainable Cities in achieving sustainable urban development and improving the review of implementation of the 2030 Agenda for Sustainable Development in the preparation of the “Smart Sustainable City Profile of Bishkek”; and (ii) explore the roles of various financial mechanisms in delivering smart and sustainable development for the city of Bishkek.

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

UNECE

Tentative Programme

Day 1	
08.45 – 09.00	Registration
09.00 – 09.30	Opening: – Mr. Bakytbek Abdiev, Director, State Agency for Architecture, Construction, Housing and Communal Services under the Government of Kyrgyzstan – Mr. Mirlan Amanturov, Vice Mayor of Bishkek, Kyrgyzstan – Ms. Gulnara Roll, Secretary to the Committee on Urban Development Housing and Land Management, UNECE – Mr. Curt Garrigan, Chief, Sustainable Urban Development Section, ESCAP
09.30 – 10.30	Session 1: Achieving the 2030 Agenda for Sustainable Development in Kyrgyzstan – Aislu Amanova, Head of Department of Sustainable Development, Ministry of Economy of Kyrgyzstan – Ms. Nazira Kerimalieva, Head of Department, Sustainable Development and Environment Statistics of the National Statistical Committee of Kyrgyzstan – Mr. Maksat Amiraev, State Agency for Architecture, Construction, Housing and Communal Services under the Government of Kyrgyzstan – Mr. Bakytbek Dzhusupbekov, Deputy Director, State Registration Service under the Government of Kyrgyzstan Questions and Answers
10.30 – 10.50	Coffee break and group photo
10.50 – 12.30	Session 2: From evidence-based policymaking to innovative financing for urban development projects – Ms. Nadia Yeremenko, UNECE – introduction of the topic and the project – Ms. Agata Krause, UNECE – "Evidence-based policymaking and the Key Performance Indicators for Smart Sustainable Cities" – Mr. Pedro Neves, UNECE – "Innovative financing of smart and sustainable urban development" Questions and Answers
12.30 – 13.30	Lunch
13.30 – 15.30	Session 3: Urbanization, resource flows, and environmental trends in the city of Bishkek – Mr. Alexander Vougioukas, ESCAP – introduces the Forecasting project and presents regional data – Presentation on the context of the city of Bishkek – Local institutions and UNDP present trends in Bishkek

	Questions and Answers
15.30 – 15.45	Coffee Break
15.45 – 16.30	Session 4: SDGs, NDCs, and cities – ESCAP presentation on the interlinkages with resource use – Questions and Answers
16.30 – 16.45	Summary and conclusions
Day 2	
09.00 – 09.15	Review of previous day
09.15 – 10.45	Session 5: Data collection to support the baseline analysis, and to identify gaps and potential proxies – ESCAP introduces the forecasting tool's data needs – Participants discuss potential data sources, data gaps and potential proxies in breakout groups, grouped by resource type
10.45 – 11.00	Coffee Break
11.00 – 12.00	Session 5 continued – Groups report back in plenary
12.00 – 13.00	Lunch
13.00-14.15	Session 6: Review of potential solutions to reduce resource intensities in Bishkek – Introduction to the kinds of solutions the tool will feature – Participants review the identified solutions and discuss additional solutions to be included in the tool in breakout groups
14.15 – 14.30	Coffee Break
14.30 – 15.30	Session 7: Inputs from participants to ensure the tool is applicable – Participants provide inputs into how the forecasting tool could better match their needs, in plenary
15.30 – 16.30	Session 8: Development of project plan in Bishkek – Presentation on project's timeline – Working Group established and project plan elaborated
16.30 – 16.45	Closing Session: Closing remarks and workshop evaluation