EXTERNAL REVIEW IN THE FORMAT OF SECOND PARTY OPINION

ON COMPLIANCE OF THE GREEN FINANCING FRAMEWORK OF THE CITY OF ALMATY WITH THE GREEN BOND PRINCIPLES OF THE INTERNATIONAL CAPITAL MARKET ASSOCIATION, AS WELL AS THE GREEN LOAN PRINCIPLES OF THE LOAN MARKET ASSOCIATION, ASIA PACIFIC LOAN MARKET ASSOCIATION AND LOAN SYNDICATIONS & TRADING ASSOCIATION

2024

EXTERNAL REVIEW IN THE FORMAT OF SECOND PARTY OPINION

ON COMPLIANCE OF THE GREEN FINANCING FRAMEWORK OF THE CITY OF ALMATY WITH THE GREEN BOND PRINCIPLES OF THE INTERNATIONAL CAPITAL MARKET ASSOCIATION, AS WELL AS THE GREEN LOAN PRINCIPLES OF THE LOAN MARKET ASSOCIATION, ASIA PACIFIC LOAN MARKET ASSOCIATION AND LOAN SYNDICATIONS & TRADING ASSOCIATION

February 6th, 2025

EXECUTIVE SUMMARY

Opinion on compliance / non-compliance of the Issuer's [1] Green Financing Framework with the GBP and GLP [2]

We believe that that the Green Financing Framework of the City of Almaty complies with the Green Bond Principles of the International Capital Market Association, as well as the Green Loan Principles of the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association.

Opinion on assigning a degree of alignment with the Green Bond Principles ranging from "Excellent" (High) to "Poor" (Low)

In accordance with the results of the assessment, as well as in accordance with the Grading Scale for the Level of Alignment with the GBP and GLP we assigned the degree of compliance "Excellent" meaning that the City of Almaty demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental significance.

Scope of External Review

This external review by GFC in the form of Second Party Opinion contains an evaluation of the Green Financing Framework of the City of Almaty approved on December 26th , 2024, and an assessment of the compliance of the potential use of proceeds from the planned issuance of green bonds and other green financing instruments by the city of Almaty with GBP and GLP.

The preparation of the Second Party Opinion includes the study of the Issuer's relevant documentation and inputs provided through direct interaction with the Issuer as per Appendix 1, as well as other publicly available information that may provide a description, details on and confirmation of compliance of processes involved in the implementation of the Akimat's policies for green bonds, green loans and green financing in general.

[1] Hereinafter, the Akimat of the city of Almaty may be referred to as the Issuer for brevity, as the Akimat primarily intends to issue green bonds. However, it should be noted that the debut instrument for securing green financing under the adopted Green Financing Framework may be green loans instead of bonds.
[2] See Methodology section below for clarification

AIFC Green Finance Centre Ltd. (GFC) confirmed with the Issuer, through document review and interviews held, that the proceeds from green financing instruments will be used to finance and/or refinance green projects that correspond to the GBP and GLP and contribute to environmental objectives. The project evaluation and selection process and the management of proceeds raised also correspond to the core components of the GBP and GLP. Reporting and disclosure of information on the use of proceeds and on the expected impact of the implemented projects will be provided on an annual basis and published on the official website of the Issuer for public access.

USE OF PROCEEDS. GFC considers that investments in the green projects as defined in the Use of Proceeds section of the Green Financing Framework of the City of Almaty are aligned with the GBP and GLP and can have positive environmental impacts.

The projects being considered by the Issuer for possible inclusion in the eligible projects pool to be financed through the prospective green bond issuance and/or green loan under the Green Financing Framework, based on GFC's review of the list of potential projects, such as the **construction of the first line of high-speed Light Rail Transit (LRT); construction and extension of Bus Rapid Transit (BRT) lines; purchase of electric buses; retrofitting of trolleybus traction substations; reconstruction of Wastewater Treatment Facilities (WWTF); construction of 2 fleets for buses powered by compressed natural gas (CNG); creation of basic tree nurseries (planting of seedlings), construction of a transport interchange hub, construction of a metro line,** are aligned with GBP and GLP categories for green transport, pollution prevention and control, environmentally sustainable management of living natural resources and land use, sustainable water and wastewater management.

PROJECT EVALUATION AND SELECTION. The Issuer has established a process for green project selection and evaluation carried out in accordance with the Budget Code of the RoK, under which the city of Almaty may issue securities in the national currency and borrow from international financial organizations to finance green projects. This process is also aligned with the internal regulations of the Akimat regarding fund-raising, which includes financial, legal, and technical evaluations of projects, as well as with the Green Financing Framework of the City of Almaty, whereby the Managing Committee of the Almaty City Akimat and its operational body represented by the Akimat Project Office are assigned the relevant functions and responsibilities for organizing and supporting the issuance of green bonds and/or the securing of green loans, including the green project selection and approval process. GFC considers that the project selection process is aligned with GBP and GLP in terms of establishing, documenting, and maintaining a decision-making process to determine the eligibility of projects and assets.

MANAGEMENT OF PROCEEDS. The management of proceeds involves allocating the full equivalent of the proceeds from the issuance of green bonds/green loans by the city of Almaty to finance and/or refinance projects. This includes preparing appropriate annual reports, maintaining separate analytical accounting of expenses related to project implementation, and monitoring the compliance of these expenses with the equivalent of the proceeds from the issuance of green bonds/green loans by the city of Almaty. Furthermore, the Akimat of the city of Almaty will aim to engage an external reviewer or other third party as part of the post-reporting process to verify the internal tracking method and the utilization of funds from the issuance of green bonds or green loans. GFC considers that the management of proceeds raised is aligned with the GBP and GLP in terms of tracking of proceeds, managing unallocated proceeds, earmarking funds to eligible projects and assets, as well as documenting and disclosing the related processes to the reviewers.

REPORTING. The Issuer adopted a Green Financing Framework and made it available prior to issuance.
The Issuer plans to prepare and approve annual reports on the use of the equivalent of the proceeds from the issuance of green bonds/green loans by the city of Almaty until the respective green bonds/green loans reach maturity. These reports will include information on the utilization of the full equivalent of the proceeds from the issuance of green bonds/green loans and the achievement of project targets (impact).

GFC considers that the reporting processes are aligned with the GBP and GLP in terms of disclosing projects and assets invested in, the intended approach to providing update reports to reaffirm conformance with the Green Financing Framework, as well as external review aspects.

Evaluation Date: February 6th, 2025

Issuer Location: Almaty, Kazakhstan

For Inquiries Contact the GFC external review team:

Milana Takhanova, Head of External Review, GFC

M.Takhanova@aifc.kz

Ainur Zhakupova, Deputy Head of External Review, GFC

A.Zhakupova@aifc.kz

TABLE OF CONTENTS

EXECUTIVE SUMMARY 2

1. METHODOLOGY OF THE AIFC GREEN FINANCE CENTRE LTD. ON PREPARATION OF AN EXTERNAL REVIEW 5

2. DESCRIPTION OF THE ISSUER'S GREEN FINANCING FRAMEWORK AND OTHER SUSTAINABILITY-RELATED STRATEGIC DOCUMENTS 7
OVERVIEW OF THE ISSUER AND GREEN FINANCING POLICIES 7
DESCRIPTION OF THE ISSUER'S GREEN FINANCING FRAMEWORK 9
PROJECT EVALUATION AND SELECTION PROCESS 17
MANAGEMENT OF PROCEEDS 19
REPORTING AND DISCLOSURES 20
3. EVALUATION OF THE ISSUER'S GREEN FINANCING FRAMEWORK AND OTHER DOCUMENTS 23
GENERAL ASSESSMENT AND DETERMINATION OF THE DEGREE OF COMPLIANCE 23
EVALUATION OF THE CRITERION – USE OF PROCEEDS 24
ON PROJECTS PROPOSED FOR FINANCING THROUGH THE USE OF PROCEEDS FROM THE FIRST GREEN BONDS OR GREEN LOANS 26
EVALUATION OF THE CRITERION – PROCESS FOR PROJECT EVALUATION AND SELECTION 37
EVALUATION OF THE CRITERION – MANAGEMENT OF PROCEEDS 39
EVALUATION OF THE CRITERION – REPORTING 40
FINAL WEIGHTED GRADE FOR CRITERION 41
ASSUMPTIONS AND LIMITATIONS 41
APPENDIX 1: List of Documents Reviewed and Interviews 42
APPENDIX 2: Review of the alignment of the green project criteria in the GFF with international benchmarks 43

1. METHODOLOGY OF THE AIFC GREEN FINANCE CENTRE LTD. ON PREPARATION OF AN EXTERNAL REVIEW

To assess the compliance of companies' sustainable finance frameworks and the corresponding business processes with the international Green/Social/Sustainability Bond and Green/Social Loan Principles, AIFC Green Finance Centre Ltd. (hereinafter referred to as GFC) applies a number of approved methodologies as part of its External Review activity.

Specifically, GFC's Methodology in relation to sustainable bond issues (i.e. green, social and sustainability bonds) is employed for the preparation of External Reviews (Second Party Opinions) for compliance of a Green/Social/Sustainability Bond and other sustainability debt issues, including the Issuer's Green/Social/Sustainability Financing Framework, with the Green Bond Principles (hereinafter referred to as GBP, or Principles), Social Bond Principles ((hereinafter referred to as SBP, or Principles) and Sustainability Bond Guidelines (hereinafter referred to as SBG, or Guidelines). The Principles are formulated by the International Capital Market Association (hereinafter referred to as ICMA).

With regard to green and social loans, a separate methodology is employed by GFC to express an independent opinion (Second Party Opinion) on the compliance of loans, including borrowers' sustainability finance frameworks to raise funds in the form of green/social loans, to the Green Loan Principles and Social Loan Principles (hereinafter referred to as GLP and SLP, respectively). The Principles were formulated by the Loan Market Association (Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association, hereinafter - LMA).

Given the full harmonization between the Green/Social Bond Principles and the Green/Social Loan Principles established by the above international standards setters, GFC's external review (Second Party Opinion) methodologies for sustainability bonds and sustainability loans are also aligned to a significant degree. Accordingly, in order to streamline the process of evaluating a company's sustainable finance framework that covers both bonds and loans, GFC applies to these sustainable finance instruments its Methodology on preparation of an external review for compliance of a sustainable bond issue to the green/social bond principles or sustainability bond guidelines, due to said Methodology setting more stringent requirements for compliance with international standards in relation to the issuance of bonds, while the criterial analysis required by the Methodology will be applied equally to possible loan instruments.

The preparation of a report in the form of a Second Party Opinion includes the study of the Issuer's relevant documentation, regulatory documents, reports, and presentations, if any, as well as other publicly available information that may provide a description, details on and confirmation of compliance of processes involved in the implementation of the company's policies for sustainability bonds, sustainability loans and sustainable financing in general. The information used for these purposes is obtained through direct interaction with the Issuer and/or from any open sources that the GFC considers reliable.

In the External Review GFC expresses its opinion according to criteria-based assessments in the following order:

1. Opinion on compliance/non-compliance of the Company's Sustainability Finance Framework with the GBP, SBP, SBG. *Minimum threshold levels for all assessment criteria need to be met all at once for us to confirm that the Issuer's Sustainability Finance Framework is in line with the GBP, SBP, SBG.*
2. Opinion on assigning a degree of alignment with the GBP, SBP, SBG ranging from "Excellent" (High) to "Poor" (Low). *Here, the assessment is carried out*

by calculating a weighted criterial grade depending on the significance of criteria. This opinion serves as additional information and is aimed at establishing a degree of alignment with the GBP, SBP, SBG. According to this methodology, any degree of alignment other than "Poor" (Low) should be considered consistent with the GBP, SBP, SBG.

In preparing the External Review, four criteria are assessed:

1. Use of Proceeds;
2. Process for Project Evaluation and Selection;
3. Management of Proceeds;
4. Reporting.

Each criterion is graded on a scale of "1" to "5". For each criterion, there is a number of indicators (subfactors). Each indicator (subfactor) that is assessed as fulfilled is assigned either a "1" score (for an important indicator that corresponds to a core principle in the GBP or SBP), a "0.5" score, or a "0.25" score (for less significant indicators that correspond to recommendations or encouraged practices in the GBP or SBP), depending on the criterion scoring scale. The final score for each criterion is calculated as a sum of scores assigned to the indicators (subfactors). The tables for criterion scoring, as well as the tables matching a sum of scores to a grade are provided in GFC's Methodology for each criterion.

For a positive opinion to be provided regarding the compliance of the Company's Sustainability Finance Framework with the GBP, SBP, SBG, this methodology establishes a grade threshold for each assessed criterion at "3" at the least. If these requirements are met, in our opinion, the Issuer's Sustainable Finance Framework will comply with the GBP, SBP, SBG. If these conditions are not met, we shall conclude that the Issuer's Sustainable Finance Framework does not comply with the GBP, SBP, SBG and issue a respective opinion.

To express an opinion on the degree of degree of alignment with GBP, SBP, SBG ranging from "Excellent" (High) to "Poor" (Low), the following algorithm for calculating criteria grades shall be used. A weighted criterial grade is calculated by multiplying a criterion grade by its weight (significance). We established that the significance of each criterion corresponds to the following weight in the overall grade:

Criterion	*Weight (significance) in the cumulative assessment:*
Use of Proceeds	45%
Process of Project Evaluation and Selection	20%
Management of Proceeds	15%
Reporting	20%

Grading Scale for the Level of Alignment with the GBP, SBP, SBG according to GFC's Methodology

Threshold Grade	*Degree*	*Definition*
High > 4.5	Excellent	Proceeds from the issuance of Green/Social/Sustainability bonds are most likely to be used for the implementation of Green/Social/Sustainability projects, respectively.

		The Green/Social/Sustainability bond issuer demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance
Average 3,5 – 4,5	Good	Proceeds from the issuance of Green/Social/Sustainability bonds are very likely to be used for the implementation of Green/Social/Sustainability projects, respectively. The Green/Social/Sustainability bond issuer demonstrates a good level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance
Satisfactory 3 – 3,5	Satisfactory	The likelihood that proceeds from the issuance of Green/Social/Sustainability bonds will be directed to the implementation of Green/Social/Sustainability projects, respectively, is at an average level. The Green/Social/Sustainability bond issuer demonstrates a satisfactory level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance.
Low < 3	Poor	The likelihood that proceeds from the issuance of Green/Social/Sustainability bonds will be directed to the implementation of Green/Social/Sustainability projects, respectively, is at a low level. The Green/Social/Sustainability bond issuer demonstrates a poor level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance.

The prepared External Review is submitted to the Issuer, after which it is to be publicly disclosed. Public disclosure is carried out through the publication of the External Review on GFC's website - https://gfc.aifc.kz/, and can also be communicated through a press release via news services and/or relevant web sources.

2. DESCRIPTION OF THE ISSUER'S GREEN FINANCING FRAMEWORK AND OTHER SUSTAINABILITY-RELATED STRATEGIC DOCUMENTS

OVERVIEW OF THE ISSUER AND GREEN FINANCING POLICIES

Almaty is the largest city in Kazakhstan and an important economic and cultural center of the country. The city is constantly growing and developing, attracting people with

its socio-economic advantages.

Over the last 10 years, the number of people living in Almaty has increased by 578 thousand, with 2.3 million people residing in the city as of November 1, 2024. The volume of the gross regional product (GRP) produced in 2023 was 24.9 trillion KZT, and the share of Almaty in the GDP of the Republic has reached the highest indicator among the regions, which is 20.8 %[3].

The city of Almaty has been actively pursuing sustainable development, driven by the United Nations Sustainable Development Goals *(hereinafter referred to as the UN SDGs)*. The city strives to integrate environmental and social aspects into its development strategies in order to create conditions for the well-being of present and future generations.

In 2022, Almaty was designated as the regional hub city for the promotion of the UN SDGs in Central Asia and Afghanistan. This new status increases Almaty's opportunities to attract investment and cutting-edge technologies, and to create an International Competence Centre to implement the global targets of the UN SDGs.

In September 2022, the Maslikhat of the city of Almaty adopted the "Programme for the development of the city of Almaty until 2025 and medium-term prospects until 2030" *(hereinafter - the Development Programme)*, which defines a vector for the formation of a harmonious metropolis, as an attractive and comfortable place for living, working and spending leisure time for the city's citizens and guests. In the run-up to the Development Programme, the key challenges, suggestions from citizens, research data and international experiences in sustainable development were carefully studied. The adopted new "Almaty Urban Development Master Plan until 2040" is also in line with the priorities of the Development Programme.

The Development Programme is structured into 7 directions, each of which is linked to one or more of the UN Sustainable Development Goals.

The directions of the Development Programme of the city of Almaty are as follows:

I. Comfortable urban environment;
II. Sustainable economic growth;
III. Manageable urbanization;
IV. Social sustainability and stability;
V. Green Almaty;
VI. Smart City;
VII. Safe City.

On the basis of Almaty City Development Centre JSC and Scientific Research Institute 'Almatygenplan' LLP, a Project office was established for the implementation of projects under the Development Programme. According to the principle of matrix structure, the groups for implementation of the basic directions were composed of employees of the Akimat of the city of Almaty and subordinate and other organizations of the Akimat of the city of Almaty.

In addition, Almaty became the first city in Kazakhstan and the Central Asia region to prepare and present a Voluntary Local Review on the achievement of 5 of the 17 UN SDGs relevant to cities:

Goal 3. Ensure healthy lives and promote well-being for all, at all ages.

[3] Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan

Goal 4. Ensure inclusive and quality education for all and promote lifelong learning.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Goal 11. Make cities inclusive, safe, resilient and sustainable.

On July 9, 2024, this local review for the city of Almaty was officially published on the United Nations website *(https://sdgs.un.org/topics/voluntary-local-reviews).*

Since the beginning of 2023, Almaty has been granted the right to foreign borrowing in local currency to finance green projects as part of the implementation of the Sustainable Development Goals through the issuance of government securities on the platform of the Astana International Financial Centre *(in accordance with paragraph 1-1 of Article 212 of the Budget Code of the Republic of Kazakhstan)* and to receive direct credits from international financial institutions *(in accordance with paragraph 1 of Article 212-1 of the Budget Code of the Republic of Kazakhstan)*.

In view of the powers granted, the Akimat of the city of Almaty is for the first time considering the possibility of attracting foreign borrowing in local currency to finance the city's green investment projects, which will help to improve the quality of life, preserve the environment and enhance economic sustainability.

In this context, the Green Financing Framework of the city of Almaty has been developed to ensure transparency in the processes of attracting investments by the Akimat of the city of Almaty to implement green projects in accordance with the strategic documents of the City through green financing instruments, such as green bonds and green loans.

DESCRIPTION OF THE ISSUER'S GREEN FINANCING FRAMEWORK

The Green Financing Framework of the city of Almaty *(hereinafter referred to as GFF, or the Framework)* is designed to demonstrate that the objectives and terms of series of bonds, credits and other types of financial instruments of the Akimat of the city of Almaty comply with the recommendations set out in the Green Bonds Principles (GBP) [4] administered by the International Capital Market Association (ICMA) *(hereinafter - the Green Bonds Principles)*, the Green Loans Principles [5] administered by the Loan Market Association, the Asia Pacific Loan Market Association and the Loan Syndications & Trading Association *(hereinafter - the Green Loans Principles)*, as well as the Classification (Taxonomy) of Green Projects of the Republic of Kazakhstan subject to financing through green bonds and green loans approved by Resolution of the Government of the Republic of Kazakhstan dated December 31, 2021, No. 996 *(hereinafter - the Taxonomy of Green Projects of the Republic of Kazakhstan)*.

The Framework outlines the key approaches of the Akimat of the city of Almaty to the use of funds raised through the issuance of city green bonds and the attraction of green loans, the project evaluation and selection procedures, the management of funds, as well as

[4] Green-Bond-Principles_June-2022-280622.pdf (icmagroup.org)
[5] Green_Loan_Principles_23_February_2023.pdf (lma.eu.com)

the approaches of the Akimat of the city of Almaty to reporting on the use of funds, including the impact statement. Each of the above components is detailed in the relevant section of the GFF and its appendices.

The Green Financing Framework of the city of Almaty offers a broad framework for the implementation of projects associated with the achievement of the UN SDGs and may include projects in the following priority areas:

- Energy efficiency;
- Pollution prevention and control;
- Products, production technologies and processes adapted to the circular economy;
- Sustainable management of living natural resources and land use, conservation of biodiversity;
- Adaptation to climate change;
- Green buildings;
- Sustainable water and wastewater management;
- Environmentally friendly transport;
- Renewable energy.

The Framework may be amended and supplemented in the event of changes in international and national standards and recommendations in the field of green financing, as well as regulatory legal acts of the Akimat of the city of Almaty and the Government of the Republic of Kazakhstan.

The Framework applies to all issuances of bonds, city loan programmes, credits and other financial instruments of the Akimat of the city of Almaty for the financing of projects that the Akimat of the city of Almaty determines to be green in accordance with the procedure described in the Framework.

USE OF PROCEEDS

The Akimat of the city of Almaty selects green projects expected to result in a significant positive contribution to environmental, social and economic performance of the city of Almaty to be financed and refinanced using green bond and/or green loan proceeds.

Therefore, the Akimat is committed to fully allocate 100% of the equivalent of the proceeds from green bonds and/or green loans of the city of Almaty to the financing and/or refinancing of eligible green projects that have been evaluated and selected in accordance with the Framework.

In the case of refinancing, the lookback period shall not exceed 24 months prior to the date of issuance of the green bonds/green loans for green project capital expenditure and 12 months for operating expenditure:

Table 1. Eligible categories of green projects

Category of eligible projects according to GBP ICMA	Compliance with the Taxonomy of Green Projects of the RoK	Threshold criteria	Alignment with UN SDGs
Renewable energy	1.1. Wind 1.2. Solar 1.3. Geothermal 1.4. Hydro 1.5. Other 1.6. Bioenergy 1.7. Renewable energy supply chain and supporting infrastructure 1.8. Hydrogen production	Without restrictions; For certain sub-sectors, according to the Green Taxonomy threshold criteria	SDG 7 – Affordable and Clean Energy
Energy Efficiency	2.1. Improving energy efficiency in existing and new industrial facilities and in the agro-industrial sector.	1) In relation to energy-efficient equipment and improvement of greenhouse gas (GHG) emission reducing technologies – *"Minimum reduction of energy consumption by 20% and/or minimum reduction of GHG emissions and/or ensuring optimization of fuel and energy resources consumption by 20% as compared with the baseline (before project implementation)"*; 2) In relation to installation of equipment for combined heat and power generation plants/cogeneration or trigeneration units – *"Minimum reduction of energy consumption by 20% and/or minimum reduction of GHG emissions by 20% as compared with the baseline (before project implementation)"*; 3) In relation to energy efficiency in power generation, transmission and distribution systems – *"Minimum reduction of electrical power losses in power generation and transmission systems by 10% as compared with the baseline (before project implementation)"*; 4) In relation to central heating – *"Minimum reduction of energy consumption by 20% as compared with the baseline (before project implementation)"*.	SDG 7 – Affordable and Clean Energy SDG 9 - Industry, Innovation and Infrastructure

	2.2. Improving energy efficiency in the budget-funded and utilities sectors	1) In relation to energy-efficient lighting or equipment – *"20% reduction in energy costs"*; 2) In relation to energy-efficient products (end-users) – *"The highest energy efficiency rating for the product type, including in accordance with energy labelling under national or intergovernmental standards, as well as the international energy efficiency rating for consumer goods Energy Star, EU Energy Label"*; 3) In relation to energy saving services – *"In accordance with ST RK ISO 50001 "Energy Management Systems. Requirements and guidelines for use" or similar internationally recognized standards".*	
	2.3. Energy-efficient buildings, structures and facilities	1) In relation to energy-efficient construction of buildings and efficiency improvement in existing commercial, municipal, residential and industrial buildings – *"Availability of the following ranking scores in the field of green construction: LEED, EDGE, BREEAM, DGNB, OMIR and/or energy efficiency labelling (high energy efficiency class)".*	
Green buildings	3.1. Green buildings	1) In relation to construction of new green buildings (commercial, municipal, industrial and residential) – *"The following green building ratings: LEED, BREEAM, EDGE, DGNB, OMIR, energy rating labels such as US Energy Star, and compliance with energy labelling schemes such as Energy Performance Certifications used in the European Union";*	SDG 9 - Industry, Innovation and Infrastructure SDG 11 - Sustainable Cities and Communities
	3.2. Related systems and construction materials	1) In relation to the production and application of systems, green construction materials and products – *"Optionally:* *1) green building ratings: LEED, EDGE, BREEAM, DGNB, OMIR;* *2) energy efficiency labelling (high energy efficiency class);* *3) energy rating labels such as the US Energy Star, or compliance with an energy labelling scheme such as the Energy Performance Certifications used by the European Union, or certification to a series of ISO standards in the field of energy efficiency of buildings (ISO 52003, 52010, 52016, 52018)* *4) certification according to certification schemes for specific construction materials (cement, concrete, ceramics, steel, etc.), such as the Concrete Sustainability Council (CSC) certification, or the availability of a verified Environmental Product Declaration (EPD) according to ISO 14025, showing a*	

		lower level of negative environmental footprint of the product".	
	3.3 Green infrastructure	1) In relation to the Green Infrastructure for Buildings – *the following green building ratings: LEED, EDGE, BREEAM, DGNB, OMIR and/or energy efficiency labelling (high energy efficiency class).*	
Pollution prevention and control	4.1. Air quality	1) In relation to air purification from industrial and urban air pollution, recycling equipment – *"Emissions to air are within the ranges of BAT-AELs established in the BAT Reference Documents (BREFs), including within the framework of the Industrial Emissions Directive (concerning industrial pollution)";* 2) In relation to the production and installation of environmentally friendly heating equipment for households and SMEs – *"Minimum reduction of GHG emissions by 20% as compared with the baseline (before project implementation)"*.	SDG 11 - Sustainable Cities and Communities SDG 12 - Responsible Consumption and Production
	4.2. Soil	1) In relation to the reduction of soil contamination; equipment and infrastructure for soil remediation (i.e. equipment and infrastructure using technologies and products for remediation of soil from pollution and degradation, including decontamination/elimination of pollution by heavy metals, pesticides, waste from landfills; improvement of soil fertility; sustainable farming, transition to sustainable farming systems, including organic farming systems; application of phytomeliorative and mechanical methods of soil protection; application of zero tillage and low impact technologies in soil management; cultivation of crops and varieties adapted to local conditions; purification from anthropogenic and man-made pollutants) – *"Without restrictions"*	
	5.2. Waste and wastewater	1)In relation to municipal waste collection and sorting equipment – *"Municipal waste shall be collected separately and secondary raw materials shall be recycled";* 2) In relation to waste recovery and recycling, equipment for the recovery, reuse and recycling of secondary raw materials – *"Recycling of collected secondary raw materials - at least 80%";* 3) In relation to facilities for the collection, sorting, recovery, reuse, recycling and disposal of industrial and hazardous waste – *"Compliance with the BAT reference documents (BREF) for waste treatment in terms of management of waste and by-products, in particular hazardous industrial waste"*;	

		4) In relation to construction and upgrading of landfills and plants for the recycling of waste not allowed to be buried – *"Compliance with the established requirements and norms of the Republic of Kazakhstan applicable at the time of the assessment of compliance with the taxonomy threshold (until 2030)"*; *5)* In relation to equipment and techniques for composting waste" threshold criterion – *"The obtained compost is used to fertilize the soil; absence of plastic, glass and metal in the finished compost; compliance of the compost with national standards for biofertilizers".*	
Circular economy adapted products, production technologies and processes	5.3. Conservation and recovery of resources	1) In relation to the use of secondary raw materials in the production of products – *"Not less than 30% of secondary raw materials in the composition of products".*	SDG 11 - Sustainable Cities and Communities SDG 12 - Responsible Consumption and Production
Climate change adaptation	5.1.2 Prevention and elimination of the consequences of droughts, floods and mud slides	1) In relation to the prevention and elimination of the consequences of drought, floods and mudslides (development of irrigation systems to combat drought; construction and operation of connections to water systems, water protection structures and other facilities to prevent and respond to water disasters; construction of anti-surge barriers; pump stations, dams, sluices, dams for coastal erosion infrastructure; storm water drainage; anti-mudflow systems; drainage systems in transport and energy infrastructure; automated and SMART systems for monitoring and early warning of storms, droughts, floods or dam failures; smart water monitoring networks) – "*Without restrictions".*	SDG 13 – Climate action
Sustainable water and wastewater management	5.1. Sustainable water use and water saving	1) In relation to the production, purchase and installation of technologies and systems for water saving, storage and distribution – *"Reduction of fresh (natural) water consumption by at least 40% for domestic and drinking purposes, 30% for irrigation and 70% for production and technical purposes";* 2) In relation to water treatment facilities (plants) – *"Drinking water: Water shall meet the sanitary requirements/norms in effect at the time of the assessment of compliance with the taxonomy threshold;* *Process water: the water must comply with the equipment certificates";* 3) In relation to waste water treatment facilities for further secondary use (domestic and industrial waste water reuse and recycling systems; closed loop reuse) – *"Use of treated water for specific secondary water use".*	SDG 6 – Clean water and sanitation SDG 11 - Sustainable Cities and Communities

	5.2. Waste and wastewater	1) In relation to waste water treatment facilities (waste water collection, storage, treatment and disposal networks; waste water treatment plants; sludge treatment facilities; drinking water treatment equipment; desalination plants; manure and slurry treatment plants) – *"Emissions to air and water are within the ranges of BAT AELs or threshold values established in the BREF for anaerobic waste treatment (if applicable)"*.	
Environmentally sustainable management of living natural resources and land use, conservation of biodiversity	6.1. Sustainable agriculture	1) In relation to climate smart agriculture- *"Reduction of fresh (natural) water consumption by at least 30%";* *Reuse of water;* *use of renewable energy;* *reduction of energy consumption or greenhouse gas emissions by at least 20%;* *for projects which aim to reduce land use, conserve degraded pastures and introduce sustainable agriculture and/or livestock production methods, alternative criteria apply, i.e. demonstration of improved productivity without additional pressure on ecosystems, reduction of food and agricultural waste or improved adaptation to climate change".*	SDG 6 – Clean water and sanitation SDG 13 – Climate action
	6.2. Sustainable forest management and conservation of biodiversity and ecosystems	1) In relation to afforestation and forest recreation - *"Without restrictions".*	
Clean transport	7.1. Low-carbon vehicles	1) In relation to purchase, lease of low carbon vehicles – *"direct emissions <50 g CO2e/km;* *for refuse collection and agricultural vehicles an alternative threshold is allowed, i.e. compliance with Euro V or VI standards";* 2) In relation to production supply chains for low carbon vehicles, motorless and micro-electric vehicles – *"direct emissions <50 g CO2e/km"*.	SDG 9 - Industry, Innovation and Infrastructure SDG 11 - Sustainable Cities and Communities
	7.2. Low-carbon freight transport	1) In relation to low carbon freight transport – *"for road transport - direct emissions of 50g CO2e / ton*km or compliance with Euro V or VI standards; for rail transport, direct emissions of 40 g CO2e / ton* km;* *In relation to air transport - the energy source has zero direct CO2e emissions (e.g. hydrogen or electricity) or SAF (sustainable aviation fuel) is used as the fuel, which provides a significant reduction in CO2e emissions on a ton*km or*	

		passenger-km basis. In this case, the feedstock for SAF shall be recognized by ICAO as eligible under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and/or certified under the EU Renewable Energy Directive (EU RED)".	
	7.3. Green transport infrastructure	1) In relation to public transport infrastructure – *"For public transport – direct emissions of 50 g CO2e/passenger-km;* *in terms of public transport infrastructure – "For public transport, direct emissions are 50 g of CO2e / passenger - km;* *without restriction for bicycle infrastructure and infrastructure for the use of personal mobility devices";* 2) In relation to low carbon transport infrastructure – *"Without restrictions";* 3) In relation to low carbon transport planning – "Without restrictions".	
	7.4. Green transport ICT	1) In relation to ICTs that improve the use of assets, flow and modal improvements, regardless of the mode of transport (public transport information, traffic flow control system and intelligent traffic lights; GPS navigator with geopositioning sensor: central dispatch office: electronic fare collection systems, car sharing schemes, smart cards, road tolling systems, etc.) – *"Availability of a certificate of compliance with the set of standards ST RK ISO/IEC 30134 "Information technologies. Data processing centres. "Key performance indicators", ST RK ISO 14001 "Environmental management systems. Requirements with guidelines for use", ST RK ISO 50001 "Energy management systems. Requirements with guidelines for use".*	

As part of the first issue of green bonds and/or green loans, the Akimat of the city of Almaty is planning to finance several projects specified in a separate appendix to the Framework (List of eligible projects of the city of Almaty recommended for financing from green bond and/or green loan proceeds).

The Akimat of the city of Almaty will not intentionally finance and/or refinance any project/activity listed in GFF in a separate annex from green bonds and/or green loans proceeds (*List of projects that are not eligible for financing and/or refinancing through proceeds from green bonds and/or green loans*).

PROJECT EVALUATION AND SELECTION PROCESS

Decisions regarding the organization and support of issuing green bonds and/or raising green loans for the implementation of projects under the Development Programme are made by the Managing Committee of the Akimat of the city of Almaty (hereinafter referred to as the Managing Committee). The goals, objectives, and functions of the Managing Committee are defined in the "Regulations on the Managing Committee of the Akimat of the city of Almaty". The Akim of the city of Almaty presides over the Managing Committee.

The relevant major functions of the Managing Committee are as follows:

1) review and approval of the list of eligible green projects for each issue of green bonds, green bond issuance programme and/or green loans raised;
2) review and approval of annual reporting on green projects financed through green bonds issued and/or green loans raised by the city of Almaty;
3) making a decision on the exclusion of projects from the list projects that, for one reason or another, are judged to no longer meet the criteria of eligible green projects as set forth in the GFF;
4) formulation of proposals for updating the GFF, if necessary.

The working (operational) body of the Managing Committee is the Project Office of the Almaty City Akimat (hereinafter referred to as the Project Office), established on the basis of the Almaty City Development Centre JSC and Scientific Research Institute “Almatygenplan” LLP, which is assigned the responsibility of supporting the issuance of green bonds and/or raising green loans of the city of Almaty. The tasks and functions of the Project Office are defined in the "Regulations on the Project Office of the Akimat of the city of Almaty".

The main functions of the Project Office are as follows:

1) review and evaluation of green projects initiated by the sectoral departments of the city of Almaty for inclusion in the list of eligible green projects financed through proceeds from the issuance of green bonds and/or obtaining green loans of the city of Almaty;
2) monitoring of eligible green projects and their costs to ensure compliance with the GFF from the date of issuance of green bonds/green loans until their full repayment;
3) preparation of annual reports on green projects financed through green bonds issued and/or green loans raised by the city of Almaty;
4) coordination of activities of relevant departments, project administrators in

conducting external audits, including expert opinions of independent parties when they provide consulting services.

The list of eligible green projects shall be established in line with the process described below.

Stage 1: Preparing a Preliminary list of eligible green projects

Sectoral departments of the city of Almaty submit to the Project Office potentially eligible projects based on the eligibility criteria specified in the "Use of Proceeds" Section of the GFF, as well as based on expected and/or achieved environmental impacts.

Eligible green projects include both current and planned projects. Eligible projects must be aligned with the relevant UN SDGs.

The Project Office, taking into account the proposals of the sectoral departments of the city of Almaty, shall prepare a preliminary list of eligible green projects for further evaluation.

Stage 2: Evaluation and approval of eligible green projects

The Project Office shall review and evaluate the preliminary list of eligible green projects against the following eligibility criteria:

- The implementation of the projects contributes to the achievement of at least one of the following primary objectives related to beneficial environmental impacts:
  - reduction of GHG emissions;
  - climate change adaptation;
  - preservation, protection or enhancement of the environment;
  - reduction of emissions and discharges of pollutants into the environment and/or prevention of their impacts on the environment;
  - energy saving and improving the efficiency of the use of existing natural resources;
  - conservation of biodiversity.
- Alignment of project objectives with the Green Bonds Principles, the Green Loans Principles and the eligibility criteria set out in the GFF. More specifically, the evaluation and selection of green projects shall be made on the basis of the criteria specified in the table in the "Use of Proceeds" section of the GFF, and the threshold criteria shall not be lower than the threshold values defined in the Taxonomy of Green Projects of the Republic of Kazakhstan.
- Do No Significant Harm. This principle of doing no harm shall be fulfilled if the projects comply with the requirements of the legislation of the Republic of Kazakhstan on environmental protection and their documented disclosure.
- The existence of a long-term positive environmental impact that:
  - is significant and quantifiable through an indicator for impact (expected and/or actually achieved). The significance of the environmental impact shall be determined with documentary evidence based on the materials and recommendations provided;
  - meets the requirements of the environmental legislation of the Republic of Kazakhstan with relevant documented disclosure.
- Significance of the projects for the environmental objectives and commitments of the

city of Almaty;

- Availability of an assessment of the project impact on the environment, including the atmosphere, hydrosphere, land cover, flora and fauna, as well as the noise impact of construction works;
- An extra verification, a favorable opinion from an external consultant or environmental audit with regard to environmental impact, and substantiation of the technological solutions applied, such as standards, certifications and research confirming environmental and technological efficiency, are an advantage in the selection process.

Based on the results of the evaluation, the Project Office prepares proposals for including a project in the list of eligible green projects, taking into account the information on the environmental impact of the projects. The list of projects shall be approved at a meeting of the Managing Committee, which shall make the final decision on the financing and/or refinancing of the projects using proceeds from green bonds and/or green loans.

The Project Office shall monitor the list of eligible green projects on a semi-annual basis, and, based on the monitoring results, the Managing Committee shall remove from the list projects that, for one reason or another, are judged to no longer meet the criteria of eligible green projects as set forth in GFF.

MANAGEMENT OF PROCEEDS

The management of proceeds refers to:

- the full allocation of proceeds from green bonds/green loans of the city of Almaty (in equivalent value) to the financing and/or refinancing of green projects;
- preparation of annual reports about the use of proceeds from green bonds/green loans of the city of Almaty, as well as about the achievement of project impact indicators;
- keeping separate analytical records of expenses incurred in the implementation of green projects;
- monitoring of the matching of these expenditures with the proceeds from green bonds/green loans of the city of Almaty.

If, at the close of a financial year in which the funds were raised, there are unallocated proceeds from green bonds/green loans of the city of Almaty for the implementation of green projects, the temporarily free budgetary funds of the Akimat of the city of Almaty shall be placed on deposit with the National Bank of the Republic of Kazakhstan in accordance with Article 101 of the Budget Code of the Republic of Kazakhstan. Investment of temporarily free budgetary money of the Akimat of the city of Almaty shall be carried out by the central competent body in charge of budget execution.

Disbursement of proceeds from green bonds/green loans of the city of Almaty shall be carried out in line with the budget legislation of the Republic of Kazakhstan, as well as the legislation of the Republic of Kazakhstan on the contractual system in the field of procurement of goods, works, services to ensure public needs.

The Akimat of the city of Almaty shall ensure the following:

- allocation of entire 100% of proceeds from green bonds/green loans of the city of Almaty to financing of eligible green projects on the List;
- proper management of unallocated proceeds from green bonds/green loans of the city of Almaty in accordance with the legislation of the Republic of Kazakhstan, taking into account the list of projects not eligible for green financing contained in Appendix 2;
- direct project management;
- achievement of environmental project impact/performance indicators;
- compliance with environmental requirements and standards in project implementation and management of social and environmental risks associated with project implementation;
- publication of a report on the use of proceeds from green bonds/green loans of the city of Almaty, as well as on the impact of the relevant financed green projects.

The Akimat of the city of Almaty will monitor on a regular basis the list of eligible green projects and will remove projects that do not meet the requirements and replace them with other eligible green projects.

The Akimat of the city of Almaty shall strive to make sure that the total value of projects financed and/or refinanced through green bonds issued or green loans raised, is not less than the total amount of outstanding green finance raised.

On a quarterly basis, the Finance Department of the city of Almaty shall maintain:

- records of expenditures on eligible green projects that have undergone the project evaluation and selection procedure (including those for refinanced projects),
- a register of green bond issues (and/or loans) containing sufficient information needed to identify each relevant issue of green bonds (each obtained green loan) to match with the list of eligible green projects of the Akimat of the city of Almaty.

The Akimat of the city of Almaty shall make sure that proceeds from green bonds or green loans are allocated to eligible green projects properly, without double counting, i.e. the same project shall not be nominated for two or more different issues of green bonds (and/or loans) in the future. There is an exception where the Akimat of the city of Almaty explicitly demonstrates (through a documented decision of the Managing Committee, which is subject to disclosure) that different issues of green bonds finance separate and clearly demarcated parts of the same eligible green project, or that one green financing instrument is refinanced by another green financing instrument.

REPORTING AND DISCLOSURES

Reporting includes the preparation and approval of annual reports on the use of proceeds from green bonds/green loans of the city of Almaty, from the date of issuance or origination to full repayment, including the expenditure of the total amount of funds, and on the achievement of project impact indicators.

The scope of information to be included in the annual report on the use of proceeds from green bonds/green loans of the city of Almaty is specified in a separate annex to the GFF.

The issued green bonds and/or raised green loans of the city of Almaty will be assessed (externally reviewed) for compliance with the Green Bonds Principles, the Green Loans Principles and/or the requirements for green instruments:

- prior to the relevant issue of green bonds/green loans of the city of Almaty;
- annually while the relevant issues of green bonds / green loans of the city of Almaty are outstanding in the manner set out in a separate annex to the GFF.

The GFF, annual reports and opinions (verification reports) on compliance of green bonds/green loans of the city of Almaty with the Green Bonds Principles, Green Loans Principles and/or the requirements for green instruments shall be published on the official website of the Akimat of the city of Almaty in the "Documents" Section "https://www.gov.kz/memleket/entities/almaty/documents/1?lang=ru". The procedure for the publication of this information is also set out in a separate appendix to the GFF.

The Akimat of the city of Almaty will endeavor to use qualitative performance (impact) indicators and, where feasible, quantitative performance (impact) indicators for projects (as described in Table 2), as well as to disclose the key methodology and/or assumptions used in making quantitative determinations, in accordance with the internal documents of the Akimat.

The Akimat of the city of Almaty will also follow, where possible, the guidelines and templates for impact reporting set forth in the Harmonized Framework for Impact Reporting, June 2024)[6].

Table 2. Impact measurement

Eligible categories	Possible quantitative performance indicators
Energy efficiency	• Expected energy savings/year (MWh) • GHG reduction (tCO2E)
Pollution prevention and control	• Reduction in particulate matter (PM 2.5) and/or other pollutants
Circular economy adapted products, production technologies and processes	• Amount of waste prevented, disposed of, decontaminated or liquidated before and after the project as a percentage of gross waste and/or in absolute quantities in tons
Environmentally sustainable management of living natural resources and land use	• Preservation/protection/expansion of natural landscape and green areas (including forest) in km² and % of growth
Climate change adaptation	• Increase in number of households/population/businesses with access to sustainable water and energy supply systems • Amount of damage prevented (in Tenge or USD, etc.
Green buildings	• Number of facilities
Sustainable water and wastewater management	• Reduction of direct water losses during treatment, transportation and distribution in cubic meters • Annual volume of wastewater treated or prevented (in cubic meters) • Reduction in discharge of polluted and/or untreated wastewater: cubic meters.

[6] https://www.icmagroup.org/assets/documents/Sustainable-finance/2024-updates/Handbook-Harmonised-Framework-for-Impact-Reporting-June-2024.pdf

Clean transport	• GHG reduction (tCO2E)
Renewable energy	• Total installed capacity (MW) • GHG reduction (tCO2E) (тCO2E)

EXTERNAL REVIEW

The Akimat of the city of Almaty shall appoint an external evaluation provider to deliver a pre-issuance Second Party Opinion on the Green Financing Framework and the green projects proposed to be financed through the issuance of green bonds and/or the raising of green loans for compliance with the Green Bonds Principles and Green Loans Principles.
The Akimat of the city of Almaty will have an external evaluation provider verify the annual report of the Akimat of the city of Almaty on the allocation of the proceeds and the impact of the corresponding projects on an annual basis, starting one year after the issuance/raising and until the full distribution of the funds from the respective green finance instruments (green bonds or raised green loans).

External evaluations and annual reports on the issued green bonds/raised green loans should be published on the website of the Akimat of the city of Almaty.

3. EVALUATION OF THE ISSUER'S GREEN FINANCING FRAMEWORK AND OTHER DOCUMENTS

In this section, we describe the assessment of the Framework and other relevant documents of the Issuer for compliance with the GBP and GLP in accordance with GFC's Methodology for preparing an external assessment. The information used for these purposes was obtained by means of direct interaction with the Issuer (see Appendix 1).

GENERAL ASSESSMENT AND DETERMINATION OF THE DEGREE OF COMPLIANCE

GFC confirmed with the Issuer, through document review and interviews held, that the proceeds from green financing instruments issued will be used to finance and/or refinance eligible green projects. The categories and criteria for eligible green projects correspond to the GBP and GLP and contribute to environmental objectives. The project evaluation and selection process and the management of proceeds also correspond to the core components of the GBP and GLP. Reporting and disclosure of information on the use of proceeds attracted and on the expected impact of the implemented projects will be provided on an annual basis and published on the official website of the Akimat of the city of Almaty.

1. Opinion on compliance/non-compliance of the Issuer's Green Financing Framework with the GBP and GLP. Based on the evaluation for meeting the minimum threshold levels for all assessment criteria, we are of the opinion that the Issuer's GFF meets the mandatory and partially additional values of the criteria, and, accordingly, we are of the opinion that the Green Financing Framework of the Issuer complies with the Green Bond Principles of the International Capital Market Association, as well as the Green Loan Principles of the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association.

2. Opinion on assigning a degree of alignment with the GBP and GLP ranging from "Excellent" (High) to "Poor" (Low). In accordance with the results of the assessment, as well as in accordance with the Grading Scale for the Level of Alignment with the GBP and GLP we assigned the degree of compliance "Excellent" meaning that the Akimat of the city of Almaty demonstrates an excellent level of proceeds management and allocation, of project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental significance.

Grading Scale for the Level of Alignment with the GBP and GLP

Threshold Grade	*Degree*	*Definition*
High 5	Excellent	Proceeds from the issuance of green financing instruments are most likely to be used for the implementation of green projects. The Issuer demonstrates an excellent level of proceeds management and allocation, of project selection, of quality of proceeds administration, as well as of

		reporting and disclosure on ongoing projects of environmental significance.

EVALUATION OF THE CRITERION – USE OF PROCEEDS

The indicators listed below reflect our assessment of the criterion "Use of Proceeds".

Indicator	*Characteristic of the indicator (permissible, mandatory indicator, not recommended)**	*Grade*
1. 100% of proceeds are allocated to implementing and financing/refinancing of green projects that bring environmental benefits and are evaluated by the Issuer for compliance with the eligible project categories in line with the GBP/GLP with regard to their qualitative and/or quantitative characteristics	Permissible	5
WEIGHTED CRITERIAL GRADE		2.25

The categories of eligible green projects defined in the GFF correspond to the project categories defined in the ICMA GBP, in particular the following:

- Environmentally friendly transport (electric, public, railway and multimodal transport, infrastructure for environmentally friendly vehicles and reduction of harmful emissions);
- Energy Efficiency (for example, energy efficiency in new and renovated buildings, energy storage, district heating, smart grids, equipment and products);
- Pollution prevention and control (including reduction of emissions, control of greenhouse gases, soil restoration, pollution prevention, pollution reduction, waste treatment, efficient processing of waste into electricity);
- Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable livestock farming; climate-friendly agricultural technologies, such as crop protection or drip irrigation; environmentally sustainable fisheries and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, conservation or restoration of natural landscapes);
- Conservation of terrestrial and aquatic biodiversity (including the protection of coastal, marine and watershed environments);
- Adaptation to climate change (including efforts to increase the resilience of infrastructure to the effects of climate change, as well as information support systems such as climate monitoring systems and early warning systems);
- Green buildings that meet regional, national, or internationally recognized standards or certifications of environmental indicators;
- Sustainable water and wastewater management (for example, a sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and other flood mitigation methods);
- Circular economy adapted products, production technologies and processes (for example, the development and implementation of recyclable, reuseable and recycled materials,

components and products; instruments and services of circular economy); and/or certified eco-effective products

- Renewable energy (including production, transmission, equipment and products).

In addition to aligning the categories of eligible green projects listed in the GFF with the main categories of the ICMA Green Bond Principles (GBP), the GFF states that the evaluation and selection of green projects will be conducted according to the criteria outlined in the GFF. This process will also consider recommendations from individual potential international investors and the criteria of the Green Taxonomy of Kazakhstan. This alignment is important due to Article 209 of the Budget Code of the Republic of Kazakhstan (*The Objectives of Borrowing by Local Executive Bodies*), which allows local executive bodies of a city of republican significance with special status to issue securities in the national currency and borrow from international financial organizations in the national currency to finance green projects as part of achieving the Sustainable Development Goals. The term "green projects" is defined in the Environmental Code of the Republic of Kazakhstan, with reference to the Green Taxonomy of Kazakhstan. In certain cases (such as in the energy efficiency category), the threshold criteria specified in the GFF are more stringent (at the request of potential international investors) than those of the Green Taxonomy. However, the GFF mandates that the threshold criteria must not be less strict than those defined in the Green Taxonomy.

Overall, it can be stated that the Green Taxonomy of Kazakhstan serves as an applicable standard for identifying and selecting green projects when issuing green bonds and securing green loans, as the ICMA Green Bond Principles encourage issuers to disclose the extent of compliance of projects with official national taxonomies[7]. Additionally, Securities Market Law No. 461 of the Republic of Kazakhstan, dated July 2, 2003, specifies that proceeds from the issuance and placement of green bonds may be allocated to projects that comply with the Green Taxonomy.

Regarding the compliance of the Green Taxonomy of Kazakhstan with international benchmarks (internationally recognized taxonomies and categorizations of green projects and activities), it can be affirmed that the Green Taxonomy fully aligns with international best practices. The development of the Green Taxonomy of Kazakhstan in 2020 involved international experts who suggested adapting the Chinese and Mongolian Taxonomies due to the environmental and climatic similarities of these countries with Kazakhstan. This adaptation was consistent with Kazakhstan's national policy objectives for addressing environmental and social challenges and aligned with the Climate Bonds Initiative (CBI) Taxonomy. The Green Taxonomy was approved by Decree No. 996 of the Government of the Republic of Kazakhstan on December 31, 2021.

In March 2024, amendments to the Taxonomy were approved by the Decree of the Government of Kazakhstan, incorporating proposals made by the AIFC that reflect the priorities set out in the Strategy to achieve carbon neutrality by 2060, as well as some other proposed amendments to threshold criteria for specific subsectors for better alignment with international standards (e.g., the European Union Taxonomy, CBI Taxonomy, etc.).

A review of the alignment of the green project criteria in the Issuer's GFF with international benchmarks (see Appendix 2) confirms that they are consistent with international best practices.

[7] At this time, the EU Taxonomy for Sustainable Activities had not yet been adopted.

The categories of eligible projects outlined in the GFF also align with the priority United Nations Sustainable Development Goals (SDGs), as indicated by the ICMA Guidelines - A High-Level Mapping to the Sustainable Development Goals, June 2023[8].

ON PROJECTS PROPOSED FOR FINANCING THROUGH THE USE OF PROCEEDS FROM THE FIRST GREEN BONDS OR GREEN LOANS

The Akimat of the city of Almaty plans to use the proceeds from the green bonds and/or green loans, in the first turn, to finance a list of eligible green projects, such as the construction of the first line of high-speed Light Rail Transit (LRT); construction and extension of Bus Rapid Transit (BRT) lines; purchase of electric buses; retrofitting of trolleybus traction substations; reconstruction of Wastewater Treatment Facilities (WWTF); construction of 2 fleets for buses powered by compressed natural gas (CNG); creation of basic tree nurseries (planting of seedlings), construction of a transport interchange hub, and construction of a metro line, which are aligned with GBP and GLP categories for green transport, pollution prevention and control, environmentally sustainable management of living natural resources and land use, sustainable water and wastewater management (see the Table "List of eligible green projects of the city of Almaty recommended for financing from green bond and/or green loan proceeds" attached to GFF and given below). After reviewing the descriptions and project documents provided by the Issuer, it has been determined that the projects align with the GBP categories and meet the criteria of the Green Taxonomy (see the column titled "Environmental impact / achievement of environmental indicators" in the table for further details).

[8] https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Green-Social-and-Sustainability-Bonds-A-High-Level-Mapping-to-the-Sustainable-Development-Goals-June-2023-220623.pdf

List of eligible projects of the city of Almaty recommended for financing from green bond and/or green loan proceeds

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
1.	Construction of the first line of high-speed Light Rail Transit (LRT)	*Project goal:* To improve the conditions for the movement of the urban population without the use of private vehicles, as well as to strengthen the unified urban public transport network and reduce air pollution in Almaty. *Project description:* • Length: ~31 km; • Maximum frequency of runs: every 4 minutes in each direction.	**Green Transport** "7.3.1 Public transport infrastructure **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	Avoidance of 1.9 million tons of GHG emissions over 15 years from the start of operation[9] Comment from the Second Party Opinion provider The project meets the Green Taxonomy criteria: direct GHG emissions from LRT rolling stock are close to zero and do not exceed 50 grams CO2e / passenger – km"
2.	Construction of Bus Rapid Transit (BRT) lines along Raiymbek Avenue	*Project goal:* To improve the infrastructure and sustainability of the urban environment on Raiymbek Avenue by providing more convenient and affordable public transport options for residents and visitors to the city. The BRT system will help to reduce the number of private cars on the road, thereby promoting environmental improvements and reducing traffic congestion in the city. *Project description:* Raiymbek Avenue is one of the most congested public transport arterials. A BRT system is planned along Raiymbek	**Green transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping	Conservatively, assuming that the public transport system consists only of diesel and compressed gas buses (i.e. not including electric buses), the replacement of private vehicles (33 cars) by 1 bus has the potential to **avoid direct CO2 emissions of** **222-226 tons of CO2 per year[10]** Comment from the Second Party Opinion provider The project meets the Green Taxonomy criteria: Conservatively, taking into account that the average occupancy of a bus is 36 people, the

[9] According to estimates by Idom, Dentons, Baker Tilly project consultants on behalf of the EBRD (2018)

[10] For example, on average, a standard public transport bus can accommodate between 40 and 60 passengers. Conservatively, based on a global average occupancy rate for light vehicles of 1.5 passengers, a 50-seat public transport unit can potentially replace 33 cars

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
		Avenue, which includes the reconstruction of the roadway to increase the dedicated infrastructure for public transport from 70% to 90%, shaping a unified avenue profile, constructing new bus stops and reducing collision intersections to make public transport in the city more efficient and comfortable.	points, multimodal passenger transport hub, etc. **Threshold criterion**: "for public transport - direct emissions of 50 g CO2e/passenger-km"	estimated direct CO2 emissions/passenger-km from fuel combustion is 21-28 grams CO2e/passenger-km for compressed gas buses and 18-26 grams CO2e/passenger-km for diesel buses, i.e. not exceeding the Green Taxonomy threshold criterion: direct emissions of 50 grams CO2e/passenger-km. To put this in perspective, the European Environment Agency[11] reports that the average emissions of new light motor vehicles in 2020 are 122.4 grams of CO2 per kilometer[12], or an average of **81.6 grams of CO2 per passenger-km** (the global average occupancy rate of light motor vehicles is 1.5 passengers). **Background on the average bus occupancy rate** In 2023, Almaty's public transport fleet consisted of 2,214 vehicles[13]. Since the average daily passenger flow in Almaty is 1,600,000 people[14], the average occupancy rate of one public transport vehicle per day is 722.5 people per day. The public transport movement in Almaty runs in the regime from 06:00 to 23:00[15]. If a bus runs 15-20 times a day, the average occupancy of a bus is 36-50 people. **Background on the impact calculation** According to the Sergek system operator's data for 2023, the average daily mileage per bus in Almaty is slightly more than 200 km (i.e. about 73,000 km per year). For diesel buses, this potentially

[11] https://www.eea.europa.eu/highlights/average-co2-emissions-from-new-cars-vans-2019
[12] The conservative approach uses European Union data for new light vehicles (which are more efficient). At the same time, the average CO2e emissions generated by a light motor vehicle are traditionally estimated to be higher, i.e. around 164 g CO2e per km (based on data from the Department of Energy Security and Net Zero of the UK Government for 2023) or 109 g CO2e per passenger-km (assuming the global average light motor vehicle occupancy rate)
[13] https://orda.kz/kak-sardiny-v-banke-almatincy-zhalujutsja-na-perepolnennyj-obschestvennyj-transport-i-ego-sostojanie-378613/
[14] https://time.kz/articles/ugol/2023/06/28/my-nikogda-ne-budem-horoshimi-dlya-perevozchikov
[15] https://www.inform.kz/ru/vremya-raboty-obschestvennogo-transporta-prodlili-v-almaty_a3887630

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
				translates into direct greenhouse gas emissions of between 46.6 and 68 tons of CO2 per bus per year. For compressed gas buses, this potentially translates into direct GHG emissions of 54.6 to 72.4 tons of CO2 per year per bus. On average, the direct emissions per 1 light motor vehicle per year (same mileage of 73,000 km) are 8.9 tons of CO2, and from 33 light motor vehicles - 294.8 tons of CO2 per year, i.e. the potential replacement of 33 light motor vehicles by 1 diesel or gas bus results in the avoidance of annual direct CO2 emissions of **222-226 tons of CO2 per year.**
3.	Extension of the BRT to Raiymbek Avenue	*Project goal:* Creation of a public transport corridor system and passenger infrastructure to ensure the prioritised movement of public transport, which will increase its carrying capacity, reduce travel time, and enhance transport connectivity between the city center and Raiymbek Avenue, while also contributing to environmental improvements by making public transport more attractive. *Project description:* The BRT system is to be built along Timiryazev Street from Baitursynov Street to Zheltoksan Street, and then along Zheltoksan Street to Raiymbek Avenue, with a length of 4.6 km, which includes the reconstruction of the roadway to increase dedicated infrastructure for public transport from 70% to 90%, the construction of new bus stops, etc.	**Green transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	The effect is similar to the project "Construction of lines along Raiymbek Avenue", see above. **Comment from the Second Party Opinion provider** The project meets the Green Taxonomy criteria: for public transport - direct emissions of 50 grams of CO2e / passenger – km
4.	Procurement of electric buses	*Project goal:* To reduce the environmental impact of public transport *Project description:* Upgrading and greening of public transport in Almaty	**Green transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail,	Conservatively, the hypothetical replacement of 1 diesel bus by 1 electric bus results in the avoidance of direct GHG emissions from 46.6 to 68 tons of CO2 per year from 1 bus; while the replacement of private vehicles (33 cars)

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
			water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	by 1 electric bus has the potential **direct emissions avoidance effect of 294.8 tons of CO2 per year.** **Comment from the Second Party Opinion provider** The project meets the Green Taxonomy criteria: direct GHG emissions from electric buses are close to zero and do not exceed 50 grams CO2e/passenger – km" **Background on the impact calculation** According to the Sergek system operator's data for 2023, the average daily mileage per bus in Almaty is slightly more than 200 km (i.e. about 73,000 km per year). For diesel buses, this potentially turns into direct greenhouse gas emissions of between 46.6 and 68 tons of CO2 per bus per year. Accordingly, the hypothetical replacement of 1 diesel bus by 1 electric bus results in the avoidance of direct GHG emissions of between 46.6 and 68 tons of CO2 per year from 1 bus. On average, the direct emissions per 1 light motor vehicle per year (same mileage of 73,000 km) are 8.9 tons of CO2, and from 33 light motor vehicles - 294.8 tons of CO2 per year, i.e. the potential replacement of 33 light motor vehicles by 1 electric bus results in the avoidance of annual direct CO2 emissions of **294.8 tons of CO2 per year.**
5.	Retrofitting of trolleybus traction substations	*Project goal:* To develop an environmentally friendly trolleybus transport infrastructure and improve the sustainability and efficiency of the urban passenger transport system. *Project description:* It is planned to upgrade 10 trolleybus traction substations, which are technically outdated and in need of renovation. Most of the original spare parts for the substations are no longer	**Green transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for	Indirect effect: If trolleybuses are taken out of service and replaced by private cars due to outdated substations, this will lead to an increase in CO2 emissions. Considering that the average annual mileage of 1 trolleybus in Almaty is 68,000 km, replacing trolleybuses with private cars potentially results in an increase in direct CO2 emissions by 274 tons per year from the replacement of 1 trolleybus, or 42.2 thousand tons

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
		produced.	public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	of CO2 per year from the replacement of 154 operating trolleybuses. As a result, the project will contribute to ensuring the uninterrupted operation of low-carbon public transport and **preventing the rise in CO2 emissions** **Comment from the Second Party Opinion provider** The project meets the public transport infrastructure criterion according to the Green Taxonomy
6.	Reconstruction of Waste Water Treatment Facilities (WWTF) in the Zhapek Batyr settlement	*Project goal:* To minimize the pollution contained in domestic and industrial waste water before it is discharged into water reservoirs, to eliminate odors in sludge handling structures, to reduce the risk to housing developments close to the emergency discharge channel, and others. *Project description:* Treatment facilities with a daily capacity of 640,000 m3 are located in the Zhapek Batyr settlement in the Ily district of the Almaty region, 15 km from the city. Once the project is implemented, the waste water will be treated in several stages to achieve a water purity of up to 95-99%, which will be discharged into the Sorbulak sewage pond for further use in agriculture for irrigation. The comprehensive WWTF reconstruction project consists of 7 sub-projects: 1) Complete reconstruction of the mechanical waste water treatment plant; 2) Construction and reconstruction of waste water treatment facilities for purification of domestic and industrial waste water through oxygenation of waste water and its further disinfection; 3) Complete reconstruction of the sludge removal header workshop in 3 lines, total length 36 km; 4) Complete reconstruction of the Sorbulak diversion canal;	**Sustainable use of water and waste** 5.2.6 Waste Water Treatment Plant **Examples:** "waste water collection, storage, treatment and disposal networks; waste water treatment plants; sludge treatment facilities; drinking water treatment equipment; desalination plants; manure and slurry treatment plants" **Threshold criterion:** Emissions to air and water are within the ranges of BAT AELs or threshold values established in the BREF for anaerobic waste treatment (if applicable)	Preventing the discharge of insufficiently treated waste water. **The approximate annual volume of treated waste water after reconstruction of the WWTF will be about 150 million m3** *(according to data for 2022 and 2023, the annual volume of treated waste water was 153 and 148 million cubic meters, respectively)*. **Comment from the Second Party Opinion provider** The project meets the Green Taxonomy criteria: Based on the results of the reconstruction of the treatment facilities, air and water emissions will remain within the established norms

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
		5) Complete reconstruction of the Kaskelen inverted siphon (5 lines); 6) Modernisation of the process flow diagram of waste water purification of the waste water treatment facilities of Almaty. Construction of sludge handling structures at the Almaty Wastewater Treatment Facilities site; 7) Reconstruction of the emergency discharge channel of the Almaty city WWTFs.		
7.	Construction of 2 fleets for buses powered by compressed natural gas (CNG)	*Project goal:* To improve bus service and extend operating hours at lower cost *Project description:* There are plans to build two bus fleets (Akan Seri Street, 'Eastern Gates' Polycenter) of 150 compressed gas buses and 50 electric buses each, including wash stations, workshop premises (for a total of 400 buses).	**Green transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	Indirect net effect of hypothetical replacement of 400 conventional diesel buses with 100 electric buses and 300 compressed gas buses, considering the creation of bus fleets, without which the operation of such buses would be impossible: the direct GHG emissions avoided would amount to **3.35-4.4 thousand tons of CO2 per.** **Comment from the Second Party Opinion provider** The project (bus depots) meets the public transport infrastructure criterion as defined in the Green Taxonomy Conservatively, given that the average bus occupancy rate is 36 people, the estimated direct emissions of CO2e/passenger-km due to fuel combustion in compressed gas buses is 21-28 grams of CO2e per 1 passenger-km, direct GHG emissions from electric buses are close to zero, i.e. does not exceed the Green Taxonomy threshold criterion: direct emissions of 50 grams of CO2e/passenger-km
8.	Creation of basic tree nurseries	*Project goal:* To improve the natural environment and expand Almaty's vegetation resources *Project description:* Construction of a permanent forest tree nursery in the	**Sustainable forest management and conservation of biodiversity and ecosystems** 6.2.1 Afforestation and forest recreation	**Expanding the vegetation resources of Almaty by 23 hectares within 5-7 years.** **Comment from the Second Party Opinion provider** As many as 45,000 trees are to be planted, however, if the possible loss allowance for growing

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
		Bostandyk district of the city (5 km and 7 km from the First President's Park), consisting of two plots of 14.26 ha and 15.1583 ha (30 ha in total). This area will be used to grow seedlings of commercially demanded species of trees and shrubs for the city's needs. The total volume of seedlings for two tree nurseries will be 45.9 thousand pieces: • Deciduous - 17.4 thousand trees. • Conifers - 15.6 thousand trees. • Shrubs - 12.9 thousand trees. The basis for the implementation of this project is the Address of the Head of State to the People of Kazakhstan in 2020, which refers to the planting of 2 billion trees in the forestry fund and 15 million trees in communities within 5 years. *Results of the project EIA:* Based on the "Instruction on Categorization of Objects with Negative Impact on the Environment", Order of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan No. 246 dated July 13, 2021, the construction works fall under Category III (subparagraph 7 "Accumulation of waste at the object: for non-hazardous waste - from 10 to 100,000 tons/year, for hazardous waste - from 1 to 5,000 tons/year", Paragraph 12). Pursuant to Article 39, Paragraph 4, of the Environmental Code of the RoK, as well as to Order of the MEG&NR of the RoK No.63 dated March 10, 2021 (Paragraph 6) "Methodology for Determining Standards for Emissions into the Environment", 'emission standards shall not be established for Category III and IV objects, as well as for mobile sources of pollutant emissions'. However, on the basis of the "Instruction on Categorization of Objects with Negative Impact on the Environment", Order of the MEG&NR of the RoK No. 246 dated July 13, 2021, the operation of tree nurseries falls under Category IV The planned activity is not on the mandatory list for conducting an environmental impact assessment and the procedure for screening the impact of the planned activity.	**Examples**: "creation of green spaces around communities" **Threshold criterion** – "Without restrictions"	forest of up to 20% is to be factored in, there will be at least 36,000 trees left). The project meets Green Taxonomy criteria - without restrictions

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
9.	Construction of the Raiymbek Batyr Transport Interchange Hub	*Project goal:* Improving transportation accessibility for city residents by providing them with the opportunity to quickly and conveniently reach various city areas by public transport, reducing the need for private car use, which helps minimize the negative environmental impact. *Project description:* The Raiymbek Batyr Hub (transport interchange hub) is a complex of facilities, including transportation infrastructure, designed to ensure safe and comfortable transfers for citizens and coordination of various types of public transport: city buses, trolleybuses, and suburban buses. The Raiymbek Batyr Hub will be located near the planned BRT line along Raiymbek Avenue, east of the Almaty-2 railway station and west of the Raiymbek Batyr metro station, within walking distance, thus enhancing transport connectivity. Additionally, a stop for the planned high-speed light rail transport (LRT) route is expected to be located near the Hub. The infrastructure of the Raiymbek Batyr Hub includes passenger pick-up and drop-off zones for buses and trolleybuses, a bus parking area, electric charging stations for electric buses, electric charging stations for private cars, and other facilities.	**Clean Transport** "7.3.1 Public transport infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, transport interchange hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	Based on conservative assumptions, with a convenient transport interchange hub available, citizens are expected to prefer using public transport instead of private cars. Specifically, 1) replacing 1 diesel and compressed natural gas (CNG) bus with 33 private cars potentially prevents 222-226 tons of CO2 emissions annually (see effect from the "Construction of Bus Rapid Transit (BRT) lines along Raiymbek Avenue" project). 2) hypothetically, replacing 1 diesel bus with 1 electric bus prevents 46.6 to 68 tons of CO2 emissions per year from 1 bus. Replacing 33 private cars with 1 electric bus potentially prevents 294.8 tons of CO2 emissions annually (see effect from the "Procurement of electric buses" project). 3) replacing private cars with 1 trolleybus potentially prevents 274 tons of CO2 emissions per year from 1 trolleybus (see effect from the "Modernization of traction substations for trolleybuses" project). 4) replacing private cars with public transport (metro) potentially prevents 29.25 million tons of CO2e annually (see effect from the " Construction of the third phase of the first line of the Almaty metro from Kalkaman station to the Barlyk market" project). Comment from the Second Party Opinion provider The project meets the public transport infrastructure criterion as defined in the Green Taxonomy: direct emissions of 50 g CO2e/passenger-km
10.	Construction of the third phase of the first line of	*Project goal:* To relieve the pressure on the urban transport system, to	**Green transport** "7.3.1 Public transport	Indirect effect: The substitution of private vehicles by public

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
	the Almaty metro from Kalkaman station to the Barlyk market	increase the volume of passenger traffic using the metro in particular and public urban transport in general, to extend transport links, to develop related infrastructure, to create conditions for further development of infrastructure in the Nauryzbai district of the city. *Project description:* The section of the third phase of the first line of the Almaty metro from Kalkaman station to the Barlyk market serves as an extension of the first line of the metro, which terminates at station No. 3. The subsurface metro line route will be 5,312 meters long with three stations built in an open pit. It is envisaged to build bypasses for two stations along Alatau Avenue. The line has two sections with a curve radius of 400m. The project considers the construction of three westward running lines and three metro stations: Station No. 1 - along Alatau Avenue, north of Abay Avenue; Station No. 2 - along Alatau Avenue at the intersection with the future extension of Tole Bi Street; Station No. 3 - in the area of the Barlyk market. In 2027, with the opening of the Kalkaman station, the metro is expected to carry 110 thousand passengers per day. As the Almaty metro system is an ongoing venture with existing rolling stock, electric trains manufactured by Hyundai Rotem, a South Korean company with more than 50 years of experience in the market, will continue to be used. **Background:** There are 15 units of electric rolling stock (ERS) in the electric engine house of PSE "Metropolitan" of the city of	infrastructure" **Examples:** Public road, rail, water and air transport and transport infrastructure; Bus Rapid Transit (BRT) systems; dedicated bus lanes for public transport; public transport car parks at terminal stations; stopping points, multimodal passenger transport hub, etc. **Threshold criterion:** "for public transport - direct emissions of 50 g CO2e/passenger-km"	transport (metro) gives a potential effect of **avoiding direct emissions of 29.25 million tCO2e per year**[16] The project meets the Green Taxonomy criteria: direct GHG emissions from metro rolling stock are close to zero (no more than 4 g CO2e per passenger-km[17]) and do not exceed the threshold criterion of 50 g CO2e/passenger-km" **Comment from the Second Party Opinion provider** The project (construction of metro line) meets the criterion of public transport infrastructure according to the Green Taxonomy.

[16] Taking into account the forecast average annual number of metro passengers (about 31 million people) in the city of Almaty by 2027, given the commissioning of Kalkaman station, and considering that the average annual emissions per passenger from light motor vehicles in Almaty are 938.2 kg (the average daily mileage of a conventional vehicle in Almaty is 31.5 km, i.e. about 11,500 km/year), the substitution of passenger cars by metro rail transport results in about 29 million tons of avoided direct CO2e emissions.

[17] Based on comparative data taken from a report by Idom, Dentons, Baker Tilly consultants on behalf of the EBRD (2018) for the LRT project. According to the Department of Energy Security and Net Zero of the UK Government for 2023 (https://ourworldindata.org/travel-carbon-footprint), the average direct GHG emissions from metro use are 28 gCO2 per km, which, given the conservative assumption of 30% load factor of a train in the Almaty metro (280 passengers), indicates almost zero emissions per passenger-km.

No.	Project	Description	Categories of green projects according to the Taxonomy of Green Projects of the RoK	Environmental impact / achievement of environmental indicators
		Almaty, 7 ERS were received in 2011 and 8 ERS - in 2021. Each train consists of four carriages. The passenger capacity of a 4-car train is 940 people. **Summary of the conclusion (dated January 27, 2023) on the potential significant impact on the environment during the implementation of the planned activity:** The planned activity will have a moderate impact on the state of the environment, provided that environmental conditions and measures for the protection of environmental components are observed. The work carried out will have a local and minor impact on the environment, limited to the period of construction and installation, after which the entire environmental balance in the area is expected to be restored.		

List of projects that are not eligible for financing and/or refinancing through proceeds from green bonds and/or green loans

1) Production of or trade in goods or performance of activities that are classified by the legislation and regulatory requirements of the Republic of Kazakhstan or by international conventions and treaties as illegal or subject to withdrawal from international circulation or prohibition.

2) Projects involving the extraction of fossil fuels and related objects designed for the transportation of fossil fuels.

3) Shaft mining of steam coal or generation of electricity by coal-fired machinery;

4) Petroleum exploration and prospecting;

5) Projects for the development of petroleum deposits, other than under rare and exceptional circumstances where the allocation of the project funds is solely for the purpose of reducing GHG emissions or the flaring of gas from existing fields;

6) Projects involving the production of disposable plastic items for consumer (non-medical) use;

7) Activities related to the forced feeding of ducks and geese;

8) Livestock farming with the main purpose of fur production or any activity related to fur production;

9) Production, placing on the market and use of asbestos fibers and products and mixtures in which these fibers have been intentionally incorporated;

10) Export of mercury and mercury compounds and the production, export and import of a wide range of mercury-containing products;

11) Commercial fishing at sea with drifting gillnets of more than 2.5 km in length;

12) Activities prohibited by the legislation of the Republic of Kazakhstan or international conventions on the protection of biodiversity or cultural heritage.

EVALUATION OF THE CRITERION – PROCESS FOR PROJECT EVALUATION AND SELECTION

According to GFF, the objectives of eligible green projects are positioned within the context of the Issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, which is in alignment with the GBP and GLP, and the Issuer has established a decision-making process which it uses to determine the eligibility of projects and assets.

Specifically, the Issuer established a process for green project selection and evaluation in accordance with its internal evaluation processes and due diligence procedures, which include financial, legal, and technical assessments of projects. This process also aligns with the GFF which provides for the assignment of functions and responsibilities related to organizing and supporting the issuance of green bonds and/or the securing of green loans, including green project selection based on technical criteria review and approval process, to the Managing Committee of the Almaty City Akimat and its operational body represented by the Akimat Project Office.

GFC considers that the project selection process is aligned with GBP and GLP in terms of establishing, documenting, and maintaining a decision-making process to determine

the eligibility of projects and assets. The indicators listed below reflect our assessment of the "Project Evaluation and Selection Process" criterion.

Indicator (Subfactor)	*Score*	*Comments*
1. Disclosure by the Issuer of information in the context of its goals, policies, strategies and processes related to sustainable development in environmental aspects, including goals to achieve improvements in the ecological environment, as well as the Issuer's participation in various activities and initiatives that indicate commitment to the principles of sustainable development and improvements in the ecological environment.	1	Compliant; disclosed in the GFF, the Almaty City Development Program until 2025 and medium-term prospects until 2030, as well as the Master Plan for the City Development until 2040.
2. Disclosure by the Issuer of the goals of issuing green bonds/projects and/or bonds/projects with directions and indicators of environmental effect.	1	Compliant; disclosed in the GFF
3. The Issuer has an internal document defining criteria for the selection of projects of environmental orientation and the procedure of their assessment, selection and coordination with the Issuer's governing bodies.	1	Compliant; disclosed in the GFF and draft templates for project selection and approval
4. Disclosure of complementary information on processes by which the Issuer identifies and manages perceived environmental risks associated with the relevant project(s).	1	Compliant; disclosed in the GFF
5. Disclosure of clear qualification criteria used in determining the compliance of projects with the categories of environmental projects and their selection, including exclusion criteria.	1	Compliant; disclosed in the GFF with a list of exceptions provided
6. The Issuer has quality certificates for ongoing environmental projects or conclusions from leading international or independent Kazakhstani reviewers confirming the compliance of projects with the required environmental/social standards, including conclusions on compliance with the current regulatory requirements for infrastructure facilities prepared within the framework of the project documentation. The leading reviewers are those who have certificates and licenses to conduct expertise or proven experience in assessing environmental projects, and / or compliance with investment requirements in the field of sustainable development.	0	The score is assigned as a conservative assessment. EIAs are available for most of the reviewed projects.
7. The Issuer has created a special subdivision, which, among other things, controls the selection and implementation of projects. The division's employees generally understand the tasks assigned to them, while some of them have experience in supporting green projects and/or projects in the field of sustainable development.	1	Compliant; disclosed in the GFF, as well as in the draft amendments to the Regulations on the City Managing Committee and on the City Project Office
8. Engaging an independent qualified party to make a decision on the selection of projects corresponding to the categories of environmental projects.	0	The score is assigned as a conservative assessment. The GFF stipulates that the Akimat will, where possible (though not mandatory), engage additional external reviewers during the evaluation process. The initial list of projects to be financed by the green bond/loan was considered

		and reviewed by the SPO provider.
9. The Issuer has a policy for determining environmental risks either in the project documentation or in the policy for determining environmental and/or social risks, which discloses qualification criteria for determining social and/or environmental risks associated with the implementation of projects.	0	The GFF states that the Issuer ensures environmental risk management during project implementation; however, there is no specific policy for identifying environmental risks.
Total Score	6	
Final Grade for Criterion	5	
WEIGHTED GRADE FOR CRITERION	1	

EVALUATION OF THE CRITERION – MANAGEMENT OF PROCEEDS

The Issuer states that the allocation of net proceeds from the issuance and placement of green bonds and green loans to eligible projects will be managed through separate analytical accounting and will be tracked accordingly. The Almaty City Akimat will monitor periodically the list of eligible green projects and exclude projects that do not meet the requirements and replace them with other eligible green projects. On a quarterly basis, the Finance Department will maintain quarterly records of expenditures allocated to finance eligible green projects that have undergone the project evaluation and selection procedure (including refinanced projects) and will keep a register of green bonds and/or loans.

Additionally, the Akimat of the city of Almaty will aim to engage an external verifier or another third party as part of the post-reporting process to verify the internal tracking method and the utilization of funds from the issuance of green bonds or green loans raised.

GFC considers that the management of proceeds is aligned with the GBP and GLP in terms of tracking of proceeds, managing unallocated proceeds, earmarking funds to eligible projects and assets, as well as documenting and disclosing the related processes to the reviewers.

The indicators of the "Management of Proceeds" criterion are listed below.

Indicator (Subfactor)	*Score*	*Comments*
1. The net proceeds from the issuance of green bonds are credited to a sub-account or moved to a different portfolio or otherwise tracked by the Issuer in an appropriate manner	1	Compliant; disclosed in the GFF
2. The separate accounting method for the green bond proceeds is clearly defined in the Issuer's documentation	0.5	Compliant; disclosed in the GFF
3. The Issuer, while the green bonds are outstanding, monitors the sub-account on an ongoing basis, and there is a procedure in place for excluding projects that become unfit from the portfolio	1	Compliant; disclosed in the GFF. The Issuer has provided a template for a monitoring document for the sub-account

		related to green instruments issued.
4. The Issuer informs investors about the intended types of instruments for temporary placement of unused green bond proceeds	1	Compliant; disclosed in the GFF, the procedure for temporary placement of unused proceeds of the budget of the city of Almaty is defined in the Budget Code of the RoK.
5. Clear rules in place for investing temporarily unused green bond proceeds taking into account ESG-factors	0	
6. Engaging an auditor or another third party to check the method for internal tracking of the intended use of green bond proceeds	0.5	Compliant; disclosed in the GFF
Total Score	4	
Final Grade for Criterion	5	
WEIGHTED GRADE FOR CRITERION	0.75	

EVALUATION OF THE CRITERION – REPORTING

The Issuer has adopted the Green Financing Framework and made it publicly available prior to issuance. The Issuer plans to publish an allocation report and an impact report for the instruments issued under the GFF. The initial report will be published within one year of the issuance of the first green bonds or the raising of the first green loan. Reports on allocated and unallocated proceeds, as well as impact, will be provided at least annually along with the Annual Report. The Managing Committee of the Almaty City Akimat and the Project Office of the Almaty City Akimat will ensure that this reporting is conducted in compliance with the established requirements.

GFC considers that the reporting processes are aligned with the GBP and GLP in terms of disclosing projects and assets invested in, the intended approach to providing update reports to reaffirm conformance with the GFF, as well as external review aspects.

The indicators listed below reflect our assessment of the "Reporting" criterion.

Indicator (Subfactor)	*Score*	*Comments*
1. The Issuer provides a detailed report (with a list of projects) and disclosures after issuance in relation to the use of proceeds from the placement of green bonds*	1	Compliant; disclosed in the GFF
2. Reporting includes the disclosure of information on the nature of investments and the expected environmental impact	1	Compliant; disclosed in the GFF
3. The disclosed reports are to be issued at least once a year, and there is also a procedure for monitoring data accuracy	1	Compliant; disclosed in the GFF
4. The Issuer discloses information on the projects to which proceeds have been allocated, with a detailed breakdown by area (category), as well as on the environmental effect and implementation progress of individual project phases	0.5	Compliant; disclosed in the GFF

5. Methodologies in effect (or their drafts) and assumptions used to calculate environmental performance indicators are available	0	
6. The Issuer undertakes to engage independent qualified parties to evaluate its reporting on the implementation of the Green Financing Framework	0.5	Compliant; disclosed in the GFF
Total Score	4	
Final Grade for Criterion	5	
WEIGHTED GRADE FOR CRITERION	1	

* Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the information may be presented by the Issuer in generic terms or on an aggregated portfolio basis.

FINAL WEIGHTED GRADE FOR CRITERION

Criterion	Weighted Grade:
Use of Proceeds	2.25
Process of Project Evaluation and Selection	1
Management of Proceeds	0.75
Reporting and Disclosure	1
FINAL WEIGHTED GRADE FOR CRITERION	5

ASSUMPTIONS AND LIMITATIONS

An External Review (Second Party Opinion) reflects our opinion on the expected results from the issuance of green bonds and/or raising green loans and on the compliance of the Issuer's Green Financing Framework with the GBP administered by International Capital Market Association and the GLP administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association. There is a likelihood of an inaccuracy in the final conclusion due to unforeseen changes in the economic environment and the financial market.

An External Review is an independent assessment carried out based on the information provided by the Issuer in line with the GFC's methodology, it does not disclose the Issuer's confidential information and is not an indication for any investment decisions.

We do not assume any responsibility for the use and implementation of an External Review in making investment decisions.

An External Review may be updated after publication, with the reasons for such an update disclosed.

CEO
AIFC Green Finance Centre Ltd. MANAS GIZHDUANIYEV

February 6, 2025

5. Methodologies in effect (or their drafts) and assumptions used to calculate environmental performance indicators are available	0	
6. The Issuer undertakes to engage independent qualified parties to evaluate its reporting on the implementation of the Green Financing Framework	0.5	Compliant; disclosed in the GFF
Total Score	4	
Final Grade for Criterion	5	
WEIGHTED GRADE FOR CRITERION	1	

* Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the information may be presented by the Issuer in generic terms or on an aggregated portfolio basis.

FINAL WEIGHTED GRADE FOR CRITERION

Criterion	Weighted Grade:
Use of Proceeds	2.25
Process of Project Evaluation and Selection	1
Management of Proceeds	0.75
Reporting and Disclosure	1
FINAL WEIGHTED GRADE FOR CRITERION	5

ASSUMPTIONS AND LIMITATIONS

An External Review (Second Party Opinion) reflects our opinion on the expected results from the issuance of green bonds and/or raising green loans and on the compliance of the Issuer's Green Financing Framework with the GBP administered by International Capital Market Association and the GLP administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association. There is a likelihood of an inaccuracy in the final conclusion due to unforeseen changes in the economic environment and the financial market.

An External Review is an independent assessment carried out based on the information provided by the Issuer in line with the GFC's methodology, it does not disclose the Issuer's confidential information and is not an indication for any investment decisions.

We do not assume any responsibility for the use and implementation of an External Review in making investment decisions.

An External Review may be updated after publication, with the reasons for such an update disclosed.

CEO
AIFC Green Finance Centre Ltd.

MANAS GIZHDUANIYEV

February 6, 2025

APPENDIX 1: List of Documents Reviewed and Interviews

Review of Documentation

Documents provided by the Issuer that relate to the prospective green bonds/green loans under the GFF are listed below. These have been used as direct sources of evidence for the SPO conclusions, and are also further checked, as considered appropriate, through interviews with key personnel.

1. The Budget Code of the RoK.
2. The Green Financing Framework of the Akimat of the City of Almaty approved by Resolution от December 26th, 2024, №4/728 "On Certain Issues of Raising Green Financing".
3. Pre-issuance documentation (draft Terms and Conditions).
4. Almaty City Development Program until 2025 and medium-term prospects until 2030.
5. Comprehensive Development Plan of Almaty Agglomeration for 2024–2028.
6. Master Plan of Almaty City with a planning horizon until 2040.
7. Spreadsheets for tracking Green Bonds/Green Loans proceeds and Green Project Funding Allocation (Excel File)
8. Draft amendments to the Regulation on the Project Office and the Regulation on the Managing Committee of the Almaty City Akimat in accordance with the GFF, to be approved in January 2025, as well as the following draft templates to be approved by the Project Office:
    - Template for a Recommendation (nomination) for including a green project in the List of eligible green projects, for consideration by the Managing Committee
    - Template for a Decision of the Managing Committee on assigning the qualification of an eligible green project with the inclusion of the project in the List of eligible green projects for financing from green bonds/loans proceeds.
    - Template for a Report on monitoring of compliance of green projects with the established criteria
9. Project documentation on the reviewed projects (project presentations, feasibility studies, DED, project data sheets, explanatory notes, etc.).
10. Environmental Impact Assessments (EIAs) for the reviewed projects.

Interviews and Information Collected from the Issuer

GFC primarily communicated with team of the Akimat of the city of Almaty to gather information about projects and bonds and collected information from the issuer.
The following key persons were involved in these communications:

1. Dastan Umirbayev, Head of the Almaty Department of Economy.
2. Vera Fedina, Deputy Head of the Almaty Department of Economy.

APPENDIX 2: Review of the alignment of the green project criteria in the GFF with international benchmarks

Table: Eligible categories of green projects given in the GFF's "Use of Proceeds" section			Comments by GFC (Second Party Opinion Provider) regarding the alignment of the green project criteria in the GFF with international standards and benchmarks (taxonomies)
Category of eligible projects according to GBP ICMA	Compliance with the Taxonomy of Green Projects of the RoK	Threshold criteria	
Renewable energy	1.9. Wind 1.10. Solar 1.11. Geothermal 1.12. Hydro 1.13. Other 1.14. Bioenergy 1.15. Renewable energy supply chain and supporting infrastructure 1.16. Hydrogen production	Without restrictions; For certain sub-sectors, according to the Green Taxonomy threshold criteria.	• The RES criteria generally align with best international benchmarks, including the Climate Bonds Initiative (CBI) Taxonomy, the key criteria of the EU Taxonomy, and the project classifier agreed upon by multilateral development banks (the Paris-aligned list), as outlined in the European Bank for Reconstruction and Development Guidance on the Methodology to Determine Paris Agreement Alignment of Indirectly Financed EBRD Investments (the "EBRD Paris-aligned list"). Notably, for the threshold criterion (Without Restrictions) for wind and solar energy, as well as small hydropower plants. • For medium-sized hydropower plants (up to 100 MW), the Green Taxonomy provides criteria that are harmonized with the CBI Taxonomy. • For geothermal power generation, the Green Taxonomy specifies the criterion, such as "if electric heat pumps are used, the global warming potential of the refrigerant must not exceed 700." In contrast, international benchmarks, such as the CBI and EU Taxonomies, set a threshold requiring life-cycle GHG emissions not to exceed 100 gCO2e/kWh, with emissions calculated in accordance with the European Commission Recommendation 2013/179/EU or ISO standards 14067:2018 or 14064-1:2018

			(quantification of GHG emissions and life-cycle carbon footprint, verified by a third party). National taxonomies in the region (e.g., Chinese, Mongolian, Russian, and Georgian) do not set specific thresholds for geothermal power generation projects. Additionally, while the use of refrigerants is mentioned in the EU Taxonomy for electric heat pumps (with a threshold of "global warming potential not exceeding 675"), it is not included in the criteria for geothermal power generation in any of the other benchmarks reviewed. • For bioenergy, the Green Taxonomy specifies the following criteria: "1) Life-cycle greenhouse gas emissions must be 70% below the coal baseline (i.e., emissions from coal-fired power generation or the level of an internationally recognized comparator for fossil fuels); 2) Biomass must be sourced from feedstocks produced using environmentally sustainable methods (wood must only come from wood waste; feedstocks from land with high biodiversity and/or high carbon stock are excluded; there must be an assessment of the impact on soil quality and carbon stock, and a high minimum share of waste, over 50%, is required)." These criteria are broadly similar to those outlined in the CBI Taxonomy, except that the CBI Taxonomy mandates an 80% reduction in GHG emissions compared to the fossil baseline. It should also be noted that the IPCC Methodology[18] assigns a value of zero to CO2 emissions from the combustion of biofuels (biomass) when determining Scope 1 CO2 emissions, as CO2 absorption occurs during the growth of fast-growing biomass used as an energy source (the principle of bioenergy carbon

[18] 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4 (Agriculture, Forestry and Other Land Use). According to the Guidelines, these emissions are accounted for by an entity outside the accounting of Scope 1 emissions. Biomass should be accounted for in the forestry and other land use (LULUCF) category, not in the energy category.

			neutrality). Even in cases where life-cycle GHG emission estimates in individual studies include biogenic emissions from combustion (see the IPCC Fifth Assessment Report[19]), life-cycle albedo effects can significantly offset biogenic emissions. Therefore, for biomass and biofuels, other life-cycle GHG emissions take precedence, including emissions from feedstock production (such as direct land-use change), feedstock processing, biofuel/bioenergy production, biofuel storage and blending, and biofuel transportation. According to the same IPCC Report, the difference in average life-cycle GHG emission factors between coal-fired and biomass-fired power generation projects is approximately 72% (820 gCO2eq/kWh for coal and 230 gCO2eq/kWh for biomass). This supports the justification for requiring a 70% GHG reduction compared to the fossil baseline.

[19] Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change, Mitigation of Climate Change, 2014

Energy Efficiency	2.1. Improving energy efficiency in existing and new industrial facilities and in the agro-industrial sector	1) In relation to energy-efficient equipment and improvement of greenhouse gas (GHG) emission reducing technologies – *"Minimum reduction of energy consumption by 20% and/or minimum reduction of GHG emissions and/or ensuring optimization of fuel and energy resources consumption by 20% as compared with the baseline (before project implementation)"*; 2) In relation to installation of equipment for combined heat and power generation plants/cogeneration or trigeneration units – *"Minimum reduction of energy consumption by 20% and/or minimum reduction of GHG emissions by 20% as compared with the baseline (before project implementation)"*; 3) In relation to energy efficiency in power generation, transmission and distribution systems – *"Minimum reduction of electrical power losses in power generation and transmission systems by 10% as compared with the baseline (before project implementation)"*; 4) In relation to central heating – *"Minimum reduction of energy consumption by 20% as compared with the baseline (before project implementation)"*.	Setting a requirement for a 20% reduction in energy losses, energy efficiency improvements, and/or GHG emission reductions aligns with international benchmarks. The criterion of 20% energy efficiency improvements and/or GHG emission reductions can be considered reasonable when taking into account the local context (the current carbon-intensive fuel mix in Kazakhstan's heat and power sector) and available technologies. For example, in heat generation, replacing older boilers with more efficient models can result in efficiency improvements ranging from as little as 5% to over 20%, depending on the fuel type and technology. This variation in efficiency should be taken into consideration. In residential energy efficiency, the issuance of Fannie Mae Green Rewards Mortgage Loans (USA)—one of the leading green mortgage programs—applies a criterion of "improvements that reduce annual energy and/or water consumption by at least 30% in aggregate, with **a minimum of 15%** projected energy savings." This demonstrates that the level of ambition in energy efficiency criteria aligns with international practices. For energy efficiency in energy generation, transmission, and distribution systems, achieving more than a 10% reduction in energy losses is notably difficult. The threshold criterion for such projects (a 10% reduction in losses) is set in Kazakhstan's Framework and Taxonomy, reflecting results from KEGOC's energy audit and the current lack of a functioning balancing electricity market in the country. Additionally, a report by Imperial College London on the UK electricity network assessed strategies to reduce grid losses, such as smart high voltage circuit breakers, voltage control, eco-design transformers, smart distribution transformers, etc. It found that reductions in active power could lead to average national grid savings of up to 5.5%. These findings support the adoption of
	2.2. Improving energy efficiency in the budget-funded and utilities sectors	1) In relation to energy-efficient lighting or equipment – *"20% reduction in energy costs"*; 2) In relation to energy-efficient products (end-users) – *"The highest energy efficiency rating for the product type, including in accordance with energy labelling under national or intergovernmental standards, as well as the international energy efficiency rating for consumer goods Energy Star, EU Energy Label"*; 3) In relation to energy saving services – *"In accordance with ST RK ISO 50001 "Energy*	

		Management Systems. Requirements and guidelines for use" or similar internationally recognized standards".	a more realistic measure for network efficiency improvement, such as a 10% reduction in grid losses instead of 20%.
	2.3. Energy-efficient buildings, structures and facilities	1) In relation to energy-efficient construction of buildings and efficiency improvement in existing commercial, municipal, residential and industrial buildings – *"Availability of the following ranking scores in the field of green construction: LEED, EDGE, BREEAM, DGNB, OMIR and/or energy efficiency labelling (high energy efficiency class)".*	
Green buildings	3.1. Green buildings	1) In relation to construction of new green buildings (commercial, municipal, industrial and residential) – *"The following green building ratings: LEED, BREEAM, EDGE, DGNB, OMIR, energy rating labels such as US Energy Star, and compliance with energy labelling schemes such as Energy Performance Certifications used in the European Union";*	The level of ambition of the criteria can be considered appropriate in relation to recognized international green building certification systems, such as LEED, BREEAM, EDGE, and DGNB, which also align with the requirements of the CBI Taxonomy. The Kazakhstani system of green building certification, known as 'OMIR,' is a voluntary certification system developed by the initiative of the Kazakhstan Green Building Council (KazGBC) with the involvement of international experts and organizations specializing in green building. This system is utilized within the Consortium of actors in Kazakhstan's green construction industry. The development process of the OMIR system was organized in accordance with the World Green Building Council's (WorldGBC) recommendations, as outlined in their Quality Assurance Guidelines for the Development of Green Building Rating Systems. However, when selecting green projects for certification under the OMIR system, preference should be given to projects that achieve ratings of at least 'gold' (highly preferable) and 'silver.'
	3.2. Related systems and construction materials	1) In relation to the production and application of systems, green construction materials and products – *"Optionally:* *1) green building ratings: LEED, EDGE, BREEAM, DGNB, OMIR;* *2) energy efficiency labelling (high energy efficiency class);* *3) energy rating labels such as the US Energy Star, or compliance with an energy labelling scheme such as the Energy Performance Certifications used by the European Union, or certification to a series of ISO standards in the field of energy efficiency of buildings (ISO 52003, 52010, 52016, 52018)* *4) certification according to certification schemes for specific construction materials (cement, concrete, ceramics, steel, etc.), such as the Concrete Sustainability Council (CSC) certification, or the*	

		availability of a verified Environmental Product Declaration (EPD) according to ISO 14025, showing a lower level of negative environmental footprint of the product".	
	3.3 Green infrastructure	1) In relation to the Green Infrastructure for Buildings – *the following green building ratings: LEED, BREEAM, EDGE, DGNB, OMIR and/or energy efficiency labelling (high energy efficiency class).*	
Pollution prevention and control	4.1. Air quality	1) In relation to air purification from industrial and urban air pollution, recycling equipment – *"Emissions to air are within the ranges of BAT-AELs established in the BAT Reference Documents (BREFs), including within the framework of the Industrial Emissions Directive (concerning industrial pollution)";* 2) In relation to the production and installation of environmentally friendly heating equipment for households and SMEs – *"Minimum reduction of GHG emissions by 20% as compared with the baseline (before project implementation)".*	Compliant with EBRD Paris-Aligned list
	4.2. Soil	1) In relation to the reduction of soil contamination; equipment and infrastructure for soil remediation (i.e. equipment and infrastructure using technologies and products for remediation of soil from pollution and degradation, including decontamination/elimination of pollution by heavy metals, pesticides, waste from landfills; improvement of soil fertility; sustainable farming, transition to sustainable farming systems, including organic farming systems; application of phytomeliorative and mechanical methods of soil protection; application of zero tillage and low impact technologies in soil management; cultivation of crops and varieties adapted to local conditions; purification from anthropogenic and man-made pollutants) – *"Without restrictions"*	

	5.2. Waste and wastewater	1)In relation to municipal waste collection and sorting equipment – *"Municipal waste shall be collected separately and secondary raw materials shall be recycled";* 2) In relation to waste recovery and recycling, equipment for the recovery, reuse and recycling of secondary raw materials – *"Recycling of collected secondary raw materials - at least 80%";* 3) In relation to facilities for the collection, sorting, recovery, reuse, recycling and disposal of industrial and hazardous waste – *"Compliance with the BAT reference documents (BREF) for waste treatment in terms of management of waste and by-products, in particular hazardous industrial waste"*; 4) In relation to construction and upgrading of landfills and plants for the recycling of waste not allowed to be buried – *"Compliance with the established requirements and norms of the Republic of Kazakhstan applicable at the time of the assessment of compliance with the taxonomy threshold (until 2030)"*; *5)* In relation to equipment and techniques for composting waste" threshold criterion – *"The obtained compost is used to fertilize the soil; absence of plastic, glass and metal in the finished compost; compliance of the compost with national standards for biofertilizers".*	
Circular economy adapted products, production technologies and processes	5.3. Conservation and recovery of resources	1) In relation to the use of secondary raw materials in the production of products – *"Not less than 30% of secondary raw materials in the composition of products".*	Compliant with EBRD Paris-Aligned list
Climate change adaptation	5.1.2 Prevention and elimination of the consequences of droughts, floods and	1) In relation to the prevention and elimination of the consequences of drought, floods and mudslides (development of irrigation systems to combat drought; construction and operation of connections	In terms of water monitoring systems, as well as drought, flood, and mudflow management, dam construction complies with the CBI Taxonomy without restrictions.

	mud slides	to water systems, water protection structures and other facilities to prevent and respond to water disasters; construction of anti-surge barriers; pump stations, dams, sluices, dams for coastal erosion infrastructure; storm water drainage; anti-mudflow systems; drainage systems in transport and energy infrastructure; automated and SMART systems for monitoring and early warning of storms, droughts, floods or dam failures; smart water monitoring networks) – "*Without restrictions*".	
Sustainable water and wastewater management	5.1. Sustainable water use and water saving	1) In relation to the production, purchase and installation of technologies and systems for water saving, storage and distribution – *"Reduction of fresh (natural) water consumption by at least 40% for domestic and drinking purposes, 30% for irrigation and 70% for production and technical purposes";* 2) In relation to water treatment facilities (plants) – *"Drinking water: Water shall meet the sanitary requirements/norms in effect at the time of the assessment of compliance with the taxonomy threshold;* *Process water: the water must comply with the equipment certificates";* 3) In relation to waste water treatment facilities for further secondary use (domestic and industrial waste water reuse and recycling systems; closed loop reuse) – *"Use of treated water for specific secondary water use".*	Compliant with EBRD Paris-Aligned list
	5.2. Waste and wastewater	1) In relation to wastewater treatment facilities (wastewater collection, storage, treatment and disposal networks; wastewater treatment plants; sludge treatment facilities; drinking water treatment equipment; desalination plants; manure and slurry treatment plants) – *"Emissions to air and water are within the ranges of BAT AELs or threshold values*	

		established in the BREF for anaerobic waste treatment (if applicable)".	
Environmentally sustainable management of living natural resources and land use, conservation of biodiversity	6.1. Sustainable agriculture	1) In relation to climate smart agriculture- *"Reduction of fresh (natural) water consumption by at least 30%";* *Reuse of water;* *use of renewable energy;* *reduction of energy consumption or greenhouse gas emissions by at least 20%;* *for projects which aim to reduce land use, conserve degraded pastures and introduce sustainable agriculture and/or livestock production methods, alternative criteria apply, i.e. demonstration of improved productivity without additional pressure on ecosystems, reduction of food and agricultural waste or improved adaptation to climate change".*	Compliant with EBRD Paris-Aligned list.
	6.2. Sustainable forest management and conservation of biodiversity and ecosystems	1) In relation to afforestation and forest recreation - *"Without restrictions".*	
Clean transport	7.1. Low-carbon vehicles	1) In relation to purchase, lease of low carbon vehicles – *"direct emissions <50 g CO2e/km;* *for refuse collection and agricultural vehicles an alternative threshold is allowed, i.e. compliance with Euro V or VI standards";* 2) In relation to production supply chains for low carbon vehicles, motorless and micro-electric vehicles – *"direct emissions <50 g CO2e/km".*	Direct emissions <50 g CO2e/km are aligned with international benchmarks, including the EU Taxonomy, CBI, Georgian Taxonomy, Russian Taxonomy, EBRD Paris-Aligned list, etc. However, more relaxed alternative thresholds are proposed for refuse collection and agricultural vehicles, requiring compliance with Euro V or VI standards. Threshold criteria for air transport align with those outlined in the CBI Taxonomy and Singapore Taxonomy.
	7.2. Low-carbon freight transport	1) In relation to low carbon freight transport – *"for road transport - direct emissions of 50g CO2e / ton*km or compliance with Euro V or VI standards;*	

		for rail transport, direct emissions of 40 g CO2e / ton km;* *In relation to air transport - the energy source has zero direct CO2e emissions (e.g. hydrogen or electricity) or SAF (sustainable aviation fuel) is used as the fuel, which provides a significant reduction in CO2e emissions on a ton*km or passenger-km basis. In this case, the feedstock for SAF shall be recognized by ICAO as eligible under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and/or certified under the EU Renewable Energy Directive (EU RED)".*	
	7.3. Green transport infrastructure	1) In relation to public transport infrastructure – *"For public transport – direct emissions of 50 g CO2e/passenger-km;* *in terms of public transport infrastructure – "For public transport, direct emissions are 50 g of CO2e / passenger - km;* *without restriction for bicycle infrastructure and infrastructure for the use of personal mobility devices";* 2) In relation to low carbon transport infrastructure – *"Without restrictions";* 3) In relation to low carbon transport planning – "Without restrictions".	
	7.4. Green transport ICT	1) In relation to ICTs that improve the use of assets, flow and modal improvements, regardless of the mode of transport (public transport information, traffic flow control system and intelligent traffic lights; GPS navigator with geopositioning sensor: central dispatch office: electronic fare collection systems, car sharing schemes, smart cards, road tolling systems, etc.) – *"Availability of a certificate of compliance with the set of standards ST RK ISO/IEC 30134 "Information*	

		technologies. Data processing centres. "Key performance indicators", ST RK ISO 14001 "Environmental management systems. Requirements with guidelines for use", ST RK ISO 50001 "Energy management systems. Requirements with guidelines for use".	