



Regional workshop: Issuance of Sovereign and Private Sector Green and Sustainability Bonds: Lessons from ASEAN

Ensuring Environmental Integrity and Impact Reporting:

Best practices for impact reporting and verification;
Third-party certification and preventing greenwashing;
Case studies of effective monitoring, reporting, and
verification (MRV) frameworks

Ainur Zhakupova,

Deputy Director, External Review

AIFC Green Finance Centre, Kazakhstan

Ulaanbaatar, Mongolia

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Sustainable Bonds Standards - Prerequisite for Eliminating Greenwashing

International Capital Market Association

Climate bonds initiative

Green bonds

100% of the funds raised are directed towards environmental projects



Social bonds

100% of the funds raised are directed towards social projects



Sustainability bonds

100% of the funds raised are used to finance a combination of environmental and social projects



Sustainability-linked bonds

financial and/or structural characteristics may vary depending on whether the issuer achieves pre-determined SD/ESG objectives



Green bonds

100% of the funds raised are directed towards environmental projects

Climate Bonds Standard V4

Third-party verification is required

Accredited verifiers:

The key recommendation is to obtain External Review in the format of a Second Party Opinion (for SLBs - verification)

S&P Global Rating (CICERO)

SustainAdvisory

Kestrel

Sustainable Fitch

AIFC Green Finance Centre

BCRA –Credit Rating Agency

AIFC Green Finance Centre

Japan Credit Rating Agency

ISS–Corporate

RAM Consultancy

SERFIEX

Sustainalytics

DNV

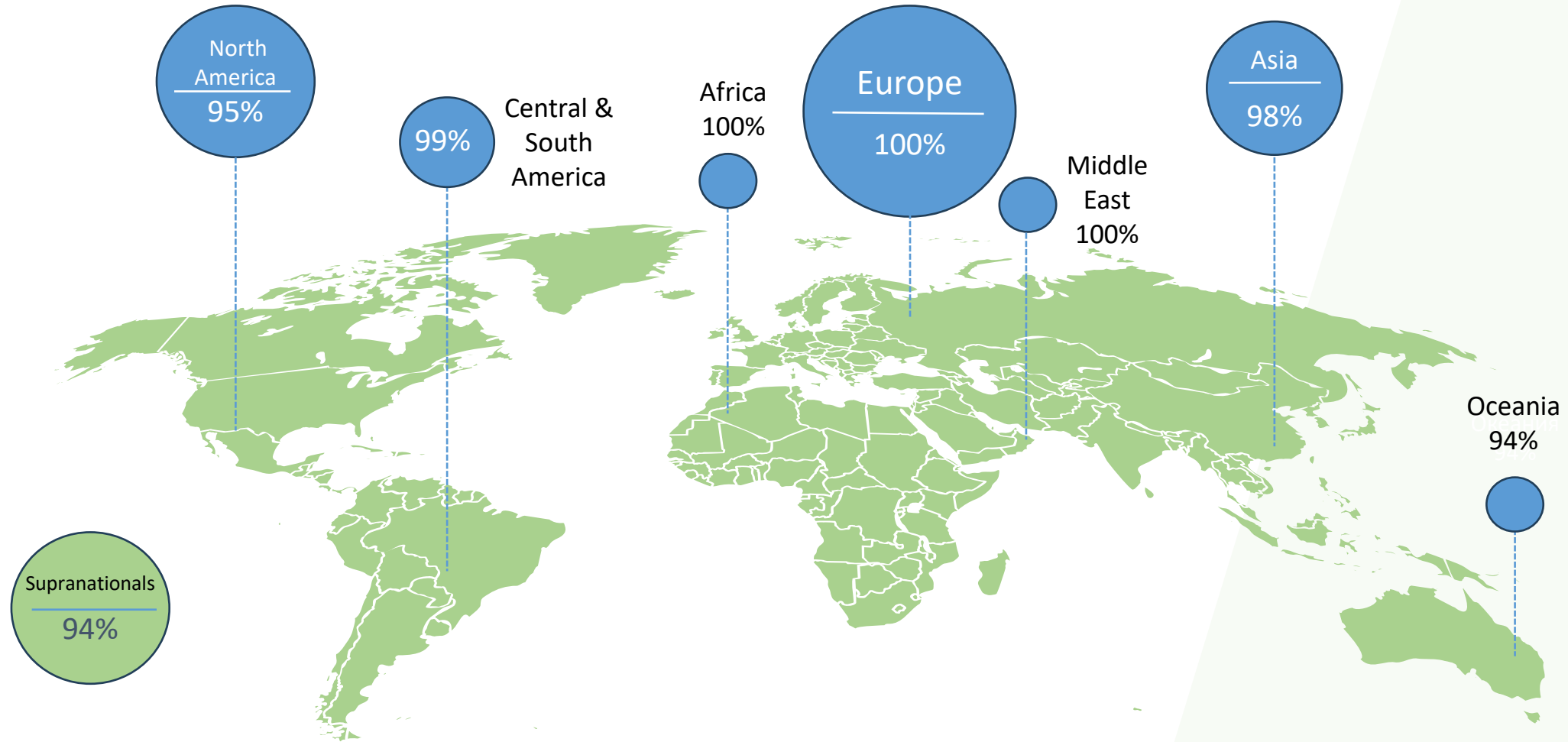
E&Y

IG Verifier

KPMG

Sustainalytics

ICMA Principles – the global standard for sustainable bond



ICMA Green Bond Principles Core Components

Pillar 1



Use of Proceeds

- ✓ The most important characteristic of a green bond is that the use of bond proceeds should be appropriately described in the bond prospectus
- ✓ In the event that all or a proportion of the proceeds are used for refinancing, issuers should provide an estimate of the share of financing vs. re-financing
- ✓ The GBP explicitly recognises several broad categories of eligibility for green projects

Pillar 2



Process for Project Evaluation and Selection

- The issuer of a green bond should clearly communicate to investors:
- ✓ the environmental sustainability objectives of the eligible green projects;
 - ✓ the process by which the issuer determines how the projects fit within the eligible green projects categories;
 - ✓ complementary information on processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s).

Pillar 3



Management of Proceeds

- ✓ The net proceeds of the green bond should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer.
- ✓ The proceeds of green bonds can be managed per bond or on an aggregated basis for multiple green bonds.
- ✓ The GBP recommends that an issuer's management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking method and the allocation of funds from the green bond proceeds

Pillar 4



Reporting

- ✓ Issuers should make, and keep, readily available up-to-date information on the use of proceeds, which should be updated annually until full allocation.
- ✓ The GBP recommends the use of both qualitative and quantitative performance indicators, and disclosure of methodology and assumptions.

ICMA Green Project Categories

The eligible Green Projects categories, include, but not limited to:

- **Renewable energy** (incl. production, transmission, appliances and products);
- **Energy efficiency** (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products);
- **Pollution prevention and control** (incl. reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/ emission-efficient waste to energy);
- **Environmentally sustainable management of living natural resources and land use** (incl. environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);
- **Terrestrial and aquatic biodiversity conservation** (incl. the protection of coastal, marine and watershed environments);
- **Clean transportation** (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);
- **Sustainable water and wastewater management** (incl. sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation);
- **Climate change adaptation** (incl. efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems);
- **Circular economy adapted products, production technologies and processes** (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services); and/or certified eco-efficient products;
- **Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance.**

Four Types of External Review of Sustainable Bonds

External Review (Second Party Opinion):

The issuer may engage consultants and/or organisations specialising in environmental issues independent of the issuer. Typically, this will include an assessment of compliance with the Green Bond Principles and an assessment of the issuer's overall objectives, strategy and/or processes with respect to environmental sustainability, as well as an assessment of the environmental features of the projects to which the proceeds from the bond issue will be directed.

Providers: CICERO, Sustainalytics, Vigeo eiris, ISS-oekom, DNV GL, AIFC GFC, etc.

PROS

- Most popular on the market
- Checks compliance with GBP, SBP, etc.
- Generally recognized in the investor community

CONS

- Represents only a pre-issue check
- Various approaches are used, including proprietary and branded methods and systems

Certification:

The issuer's green bonds, their issuance structure or the procedure for using the funds may be certified in accordance with external assessment standards. Such assessment standards provide for a number of criteria, compliance with which is assessed by qualified third parties/organizations. Thus, to obtain certification of the Climate Bonds Initiative (CBI), it is necessary to obtain a confirmation of compliance (verification) prepared by accredited CBI verifiers.

Providers: Authorized verifiers, such as those listed by the CBI or China Green Bond Verification Rules

PROS

- Includes formal independent assessment before and after release
- Verifies compliance with established standard
- Considered best practice

CONS

- Less flexible due to more specific and clear requirements than guidelines
- May not cover many green assets

Verification:

Verification of the compliance of the issuer's green bonds, their issue structure or underlying assets by qualified market participants, such as audit firms and/or companies accredited as verifiers by the Climate Bonds Initiative (CBI). The verification process aims to verify compliance with internal standards or the procedures declared by the issuer. At the same time, the assessment of the environmentally sustainable characteristics of the underlying assets may be guided by external criteria.

Providers: audit companies, EY, Deloitte, KPMG, AIFC GFC, etc.

PROS

- More formal approach to assessing the situation and preparing a conclusion than SPO
- Often confirms compliance with GBP

CONS

- The criteria used for assessment are often defined by the issuer rather than an external standard
- Verification report is often too laconic

Rating:

An issuer's green bond or related green bond program may be rated by qualified third parties, such as specialist research organisations or rating agencies, in accordance with an established rating methodology. Green bond ratings are not the same as issuer credit ratings, although they may also reflect significant environmental risks.

Providers: S&P Ratings, Moody's, Sustainalytics

PROS

- Often confirms GBP compliance
- Gives a non-binary estimate, but within a range

CONS

- The scoring criteria and methods used are proprietary (confidential) with limited transparency for investors
- Often more expensive than other assessments
- Often only a pre-issue review

ICMA: Ethical and Professional Standards for External Reviewers



Assurance service professional standards and industry wide code of conducts that external reviewers should look to adhere to, when relevant:

- International Code of Ethics for Professional Accountants;
- (Independence for Assurance Engagements other than Audit and Review Engagements);
- Attestation Standards established by the American Institute of Certified Public Accountants;
- ISAE 3000 (Revised);
- Assurance Engagements Other than Audits or Reviews of Historical Financial Information;
- IESBA Handbook of the Code of Ethics of Professional Accountants, section 291 Independence - Other Assurance Engagements;
- AICPA Code of Professional Conduct (AICPA Code);
- Certification from the Association for Responsible Investment Services (ARISE)

ICMA: Organisation of External Reviewers

While providing external reviews for GSSS bonds, External Reviewers should ensure that they:



Have an organisational structure, working procedures, and other relevant systems for carrying out the external review



Employ appropriate staff with the necessary experience and qualifications for the scope of the external review being provided



If applicable, carry the appropriate professional indemnity/ professional liability insurance cover

External reviews should either include or indicate at a minimum where the following information may be available:

1. General description of the objective, scope of work, and the external reviewer's credentials

2. The requisite credentials to evaluate KPIs, SPTs and related benchmarks, baselines and strategies for SLBs, potential environmental and sustainability risks and impacts of the green and social bond principles categories

3. Statement on independence and conflict-of-interest policy

4. Definitions, analytical approach, and/or methodologies used

5. Conclusions or output of the external review report including any limitations on the external review

Climate Bonds Standard of Climate Bonds Initiative (CBI)

CLIMATE BONDS STANDARD

Globally recognised, Paris-aligned Certification of Debt Instruments, Entities and Assets using robust, science-based methodologies

Updated April 2023

Version 4.0



The Climate Bonds Standard and Certification Scheme is a voluntary labelling scheme for investments that address the challenge of climate change, and are consistent with the goal of limiting global temperature rise to 1.5°C above pre-industrial levels.

Climate Bonds Standard

Four parts:

Use of Proceeds Debt Instruments (bonds and loans)

Assets

Non-Financial Legal Entities

Sustainability-linked debt instruments

Four components:

Use of Proceeds

Process for Project Evaluation and Selection

Management of Proceeds

Reporting

Climate Bonds Taxonomy

Energy

ELECTRICITY & HEAT PRODUCTION

	Asset type	Asset specifics	Paris Agreement compliant	Screening indicator	Certifiable
BIO-ENERGY 	Facilities producing biofuel, biomass, biogas including fuel preparation process facilities, pretreatment facilities and biorefinery facilities (if ≥50% biomass based products produced for energy use)	Facilities producing liquid biofuel, solid and gaseous biomass for heating and cogeneration	●	(i) 80% GHG emission reduction compared to fossil fuel baseline	
		Facilities producing liquid biofuel, solid and gaseous biomass for electricity production	●	AND (ii) Biofuel must be sourced from a sustainable feedstock (the only timber feedstock allowed is waste wood)	
		Facilities producing biofuel for transport	●		

Climate Bonds Standard

Global Climate Bond Certifications



To qualify as CBI approved verifier, a company must be able to demonstrate that they have competence and experience in the following 3 areas:

- Issuance of debt instruments in the capital markets and management of funds within issuing organisations.
- Technical characteristics and performance of low carbon projects and assets in areas covered by the specific criteria available under the Climate Bonds Standard.
- Provision of Assurance Services in line with the International Standards on Assurance Engagements ISAE 3000.

National regulations of External Reviewers

Examples of national regulations of External Reviewers:

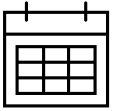
- **China:** Guidelines for the Conduct Assessment and Certification of Green Bonds (Interim) jointly issued by the People's Bank of China and the China Securities Regulatory Commission
- **European Union:** EU Green Bond Standards produced by the High-Level Expert Group (HLEG) on Sustainable Finance
- **ASEAN countries:** ASEAN Green Bond Standards
- **Russia:** National list of verifiers approved by Government Resolution No. 1587 of 09.21.2021
- **Kazakhstan:** List of verifiers approved by the Agency of Regulation and Development of the Financial Market of Kazakhstan

List of organizations-verifiers for sustainable bonds approved by the Agency for Regulation and Development of the Financial Market of Kazakhstan

- Accredited bodies for conformity assessment
- Licensed organizations in the field of environmental design and regulation, environmental expertise and environmental audit
- Energy audit organizations
- Licensed consulting companies (AIFC jurisdiction)
- State expert organizations or non-state expert organizations accredited in the field of comprehensive non-departmental examination of feasibility studies and design and estimate documentation for construction
- Service operator of "green" technologies (according to the Environmental Code of Kazakhstan)
- International financial institutions, international and national audit and consulting organizations that have a CBI accreditation
- International financial institutions, audit and consulting organizations that carry out independent assessments in accordance with the ICMA Green and Social Bond Principles

Best practices for impact reporting – main principles

In March 2015, a working group of four MDBs (AfDB, EIB, IFC and World Bank) developed and published the first Harmonised Framework for Impact Reporting, that was later revised and republished by 11 International Financial Institutions (IFIs)



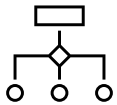
Issuers are required to report on both the use of bond proceeds, as well as their expected environmental/social impacts at least on an annual basis



Issuers are recommended to define and disclose the period and process for including projects in their report



It is recommended that report indicates the total signed amount, and the amount of bond proceeds allocated to eligible disbursements



Issuers are encouraged to put in place a formal internal process for the allocation of proceeds linked to their lending and investment operations for projects and to report on the allocation of proceeds.



Depending on the process for the allocation of proceeds, it is recommended that issuers either provide a list of projects to which bond proceeds have been allocated, or report solely on a portfolio level



Handbook

Harmonised Framework for Impact Reporting

June 2024



Best practices for impact reporting – impact indicators

Renewable Energy



Core Indicators

- #1) Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent
- #2) Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)
- #3) Additional capacity of renewable energy plant(s) constructed or rehabilitated in MW

Other Indicators, e.g.

- Additional capacity of renewable energy plant(s) to be served by transmission systems (MW)
- Decrease in the carbon intensity factor² (tCO₂e/MWh)
- Annual Absolute (gross) GHG emissions from the project in tonnes of CO2 equivalent

Energy Efficiency



Core Indicators

- #1) Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings)
- #2) Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent

Other Indicators e.g.,

- Annual Absolute (gross) GHG emissions from the project in tonnes of CO2 equivalent

Clean Transportation

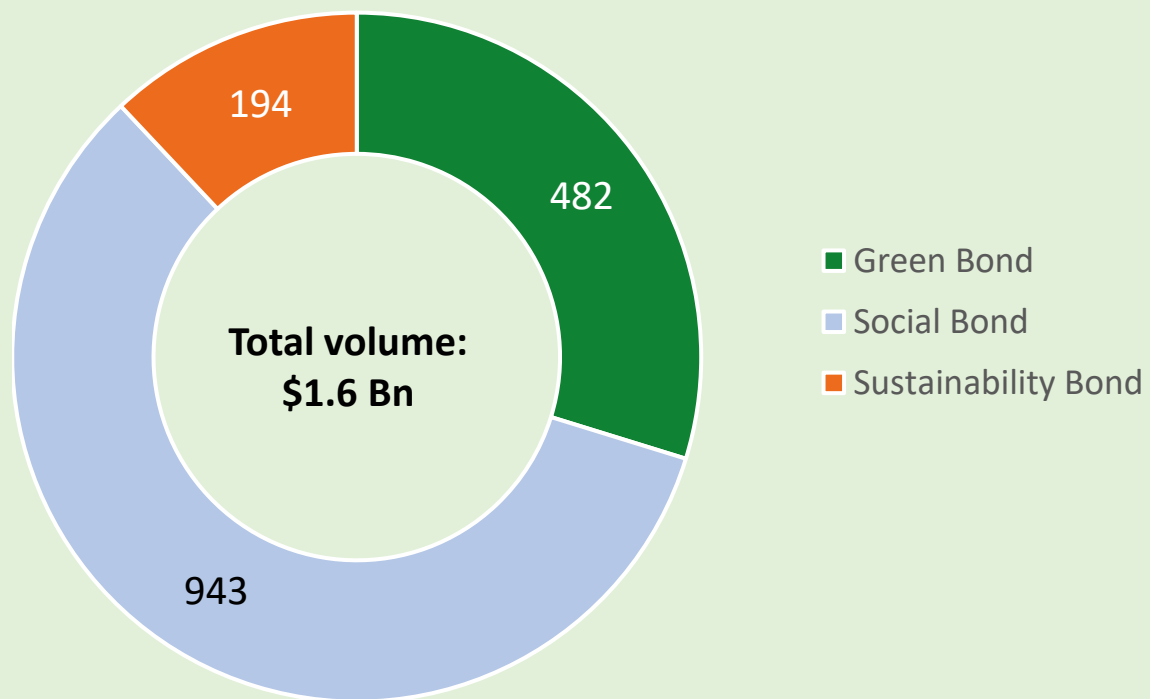


Indicators

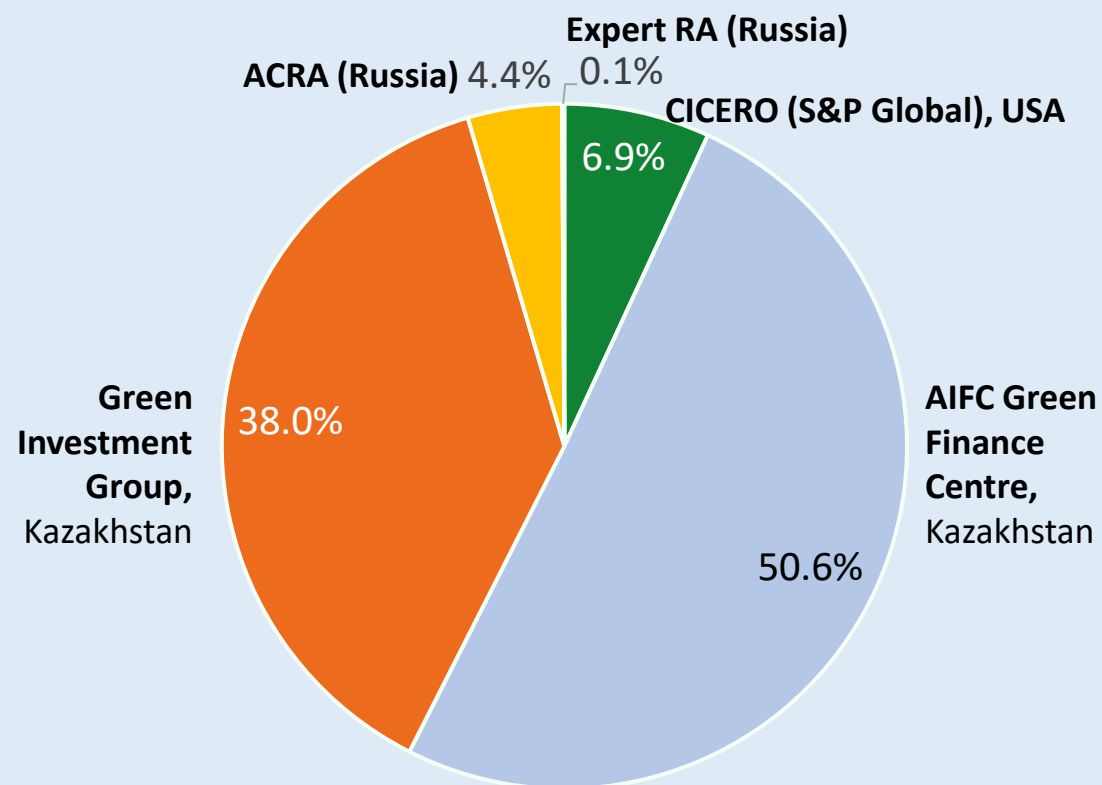
- Passenger-kilometres (i.e. the transport of one passenger over one kilometre) and/or passengers; or tonne-kilometres (i.e. the transport of one tonne over one kilometre) and/or tonnes
- Annual GHG emissions reduced/avoided in tCO₂ –e p.a.
- Reduction of air pollutants: particulate matter (PM), sulphur oxides (SO_x), nitrogen oxides (NO_x), carbon monoxide (CO), and non-methane volatile organic compounds (NMVOCs)

Sustainable bonds market in Kazakhstan

Total volume of GSSS bonds issued by type of instrument, USD m

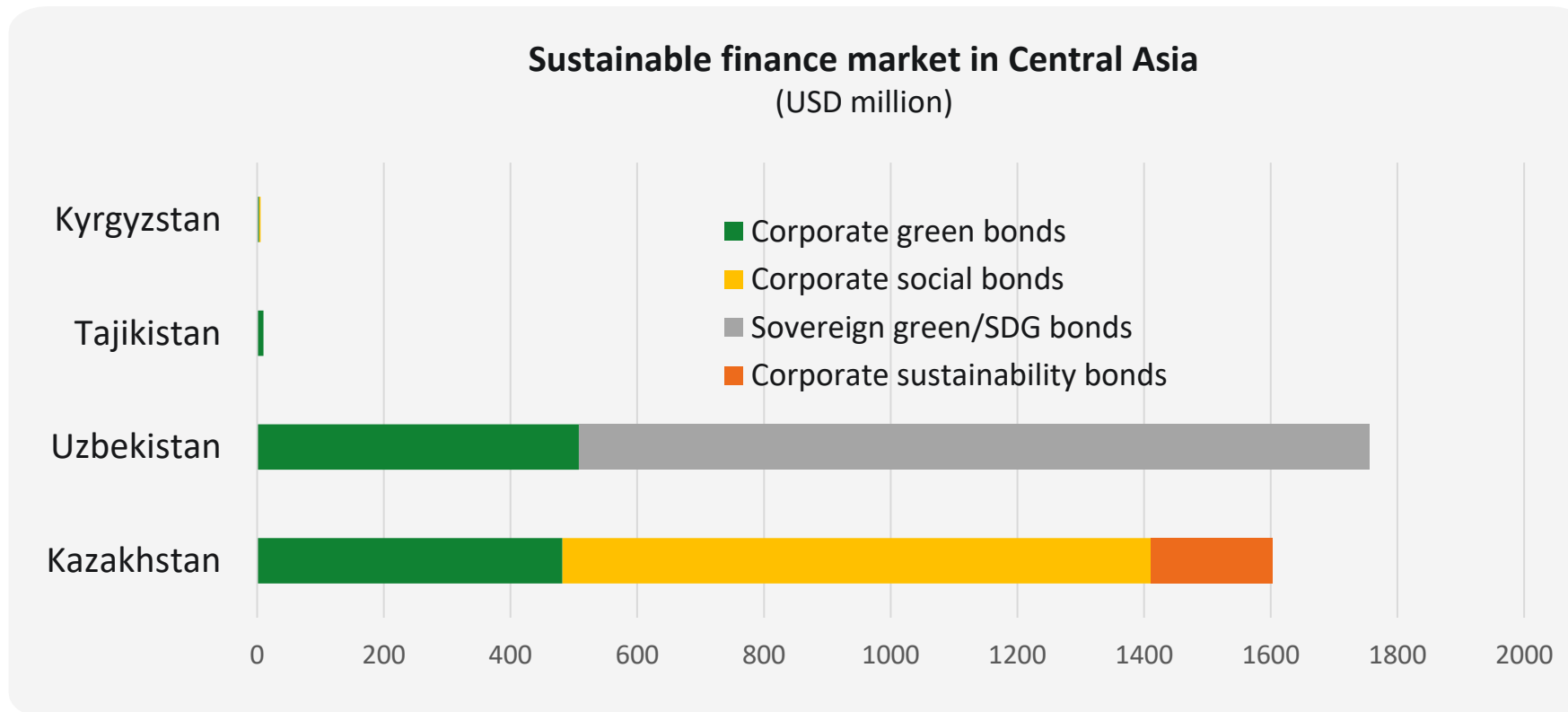


Total volume of GSSS bonds issued by external review provider, %



Sustainable Bonds Landscape in Central Asia

Kazakhstan and Uzbekistan are the leading countries in Central Asia in terms of sustainable bond issuance; while Uzbekistan focuses primarily on sovereign green/SDG bonds, Kazakhstan has a more developed corporate sustainable bond market



Green Finance taxonomy adopted:

- Kazakhstan, 2021
- Uzbekistan, 2023

External Review (SPO) Providers:

- AIFC Green Finance Centre (Kazakhstan, Kyrgyzstan, Uzbekistan)
- Sustainable Fitch (Uzbekistan)
- Sustainalytics (Uzbekistan)
- S&P Global (Tajikistan)

Source: AIFC Green Finance Centre's regional market assessment

AIFC Green Finance Centre – leading external reviewer in Central Asia

Global Recognition

The AIFC Green Finance Centre (GFC) is the only organization in Central Asia and the Caucasus accredited by both the International Capital Market Association (ICMA) and the Climate Bonds Initiative (CBI).



61 verifiers under CBI

14

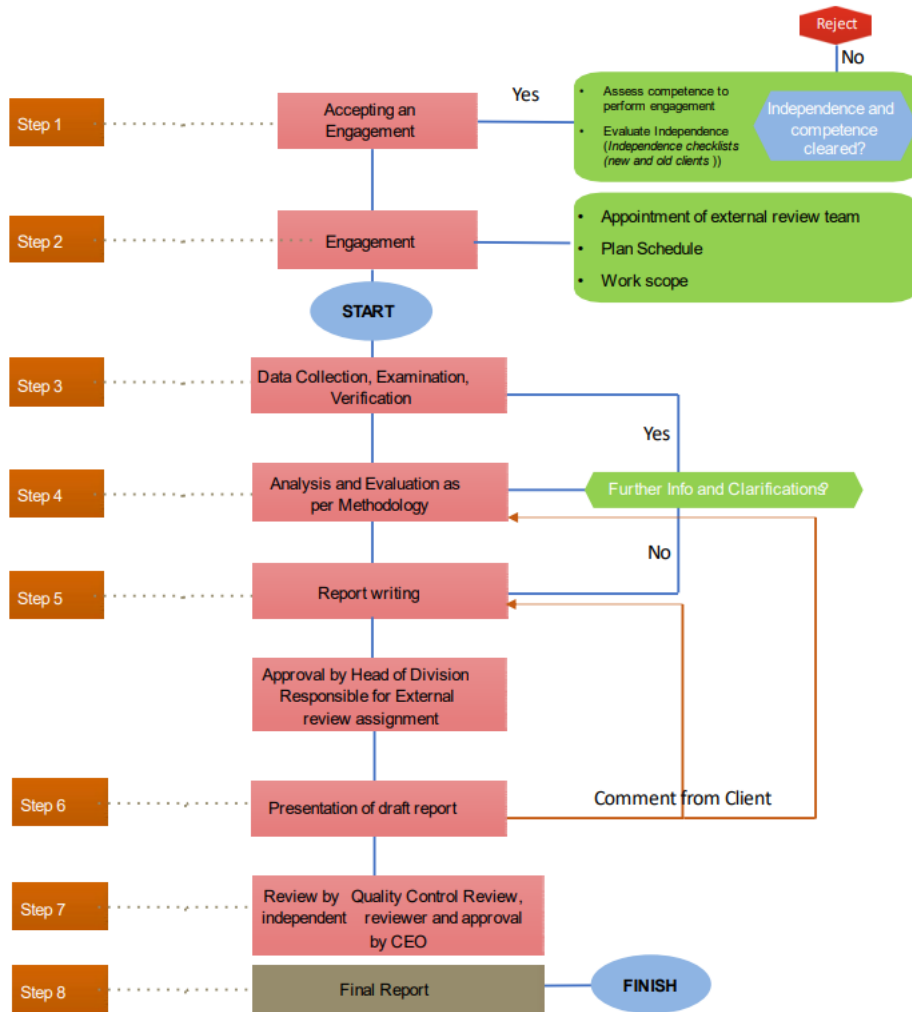
47 verifiers under ICMA

Proven Expertise

- Approximately 70% of all green bonds and loans in Kazakhstan have been verified (external review) by AIFC GFC.
- AIFC GFC has supported the inaugural green bond issuances in Azerbaijan, Kyrgyzstan, and Uzbekistan.
- Advised the Government of Kazakhstan on drafting and submitting a Green Taxonomy Resolution to the Ministry of Ecology, Geology, and Natural Resources.
- Designated as the regional chapter of the Green Investment Principles (GIP – headquartered in Beijing, China) for the Belt and Road Initiative in Central Asia, promoting sustainable investment practices.
- Established the Turkic Green Finance Council, with its Secretariat based at the AIFC.

AIFC Green Finance Centre: External Review Process

FLOW CHART FOR EXTERNAL REVIEW PROCESSES



Preparation of the External Review is carried out in several stages that can be outlined as follows:

1. Obtaining information from the Issuer:

- Green/Social/Sustainability Bond Framework;
- Policies and reports in the area of environmental, social and sustainable development;
- Other relevant documents that describe the Issuer's experience in and approach to implementing Green/Social/Sustainability projects.

2. Criteria assessment and preparation of the draft External Review:

- Use of Proceeds;
- Process of Project Evaluation and Selection;
- Management of Proceeds;
- Disclosure.

3. Clarifications with the Issuer regarding the draft External Review, if necessary

Presentation of the External Review to the Issuer and its publication on the website <https://gfc.aifc.kz/> (Second Party Opinion).

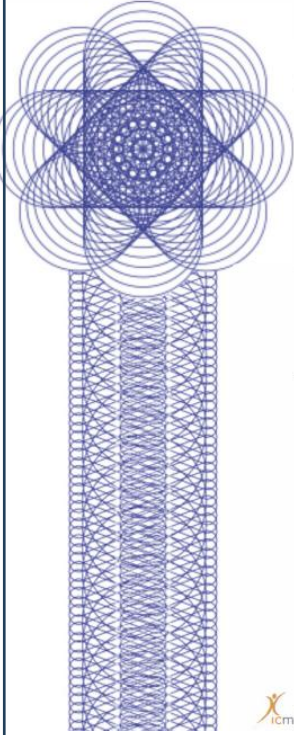
Deal summary

	
Issuer	Development Bank of Kazakhstan
Issue volume	USD 15 mln.
Date	December 2023
Stock Exchange	AIX
Coupon rate	5.65%
Verified by AIFC GFC	

AIFC GFC pre-issuance verification summary

AIFC Green Finance Centre Ltd. (GFC), based on the limited assurance procedures conducted and evidence obtained, has provided an assurance opinion that nothing has come to its attention that causes GFC to believe that, in all material respects the Development Bank of Kazakhstan JSC's (DBK, Bank) Green Bond seeking certification is not in conformance with the Climate Bonds Standard Version 4.0 and the sector-specific Wind and Solar Sector Eligibility Criteria. This assurance opinion is based on the following:
UTILISATION OF PROCEEDS. The Nominated Eligible Assets and Projects for the use of proceeds: - Construction of a 15 MW Wind power plant Jasil Jel Energy project in Akmola region, Kazakhstan, - Construction of a 153 MW Wind power plant Khromtau project, Aktope region, Kazakhstan - Construction of a 50 MW Solar power station Balkhash, Karaganda region, Kazakhstan – are aligned with the Climate Bonds Standard Version 4.0 and the sector-specific Wind and Solar Sector Eligibility Criteria. GFC considers that investments in the eligible Nominated projects will lead to positive environmental impacts and help in reducing Kazakhstan's contribution to climate change.
PROJECT EVALUATION AND SELECTION. DBK has established a process for green project selection and evaluation carried out in accordance with the Bank's internal regulations on review, financing, monitoring and implementation of investment projects, and its Green Bond Framework, with responsible structural units submitting to the Credit Committee materials on the compliance or non-compliance of an investment project with green project categories and criteria, including cases of bonds seeking certification. GFC considers that the project selection process is aligned with the Climate Bonds Standard Version 4.0 in terms of establishing, documenting, and maintaining a decision-making process to determine the eligibility of the Nominated projects and assets.
MANAGEMENT OF PROCEEDS. Allocation of DBK's Green Bond proceeds is accounted for through a special off-system sub-account "Green Bonds" (in Excel) for separate accounting and control of Green Bond use of proceeds. The Bank has identified a structural unit responsible for organizing, ensuring, and implementing an effective Green Bond management process to account for the sub-account, as well as to maintain a Registry of green projects tracking projects financed and / or refinanced with green bond proceeds. GFC considers that the management of proceeds is aligned with the Climate Bonds Standard Version 4.0 in terms of tracking of proceeds, Managing unallocated proceeds, Earmarking funds to Nominated projects and assets, as well as documenting and disclosing the related processes to the verifier.
REPORTING. The Issuer adopted a Green Bond Framework and made it available prior to issuance. According to green bond disclosure requirements in the Green Bond Framework, the Bank intends to provide and keep publicly available annual updated reports on issued Green Bonds, including certified bonds, from the date of issue until full repayment and in case of any significant changes, covering the report on the allocation of proceeds and on the environmental impact of each project. The nominated project identified for the green bond seeking certification shall be disclosed in the Bond Prospectus and the pre-issuance Assurance report. GFC considers that the reporting processes are aligned with the Climate Bonds Standard Version 4.0 in terms of disclosing Nominated Projects invested in, the intended approach to providing update reports to reaffirm conformance with the Green Bond Framework, as well as external review aspects.

CBI certification

	Certification  Aligned Use of Proceeds: 1.5* aligned This is to certify that the Green Bonds in the amount of 15 million US Dollars for a tenor of up to 1 year Issued by Development Bank of Kazakhstan JSC Has met the criteria for certification by the Climate Bonds Standard Board on behalf of the Climate Bonds Initiative  21st December 2023 SEAN KIDNEY C.E.O., Climate Bonds Initiative 
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Case study: post-issuance verification

First CBI-certified green bond in Kazakhstan

Deal and allocation summary

Type of bonds	Green Coupon Bonds
Currency	US Dollar
ISIN	KZX000001888
Issue date	22 December 2023
Maturity date	22 December 2024
Denomination	100 000 (one hundred thousand US dollars)
Number of registered bonds	150 (one hundred fifty) units
Issue volume	15 000 000 (fifteen million US dollars)
Placement volume	15 000 000 (fifteen million US dollars)
Placement volume (in KZT)	7 719 750 000 KZT (seven billion seven hundred nineteen million seven hundred fifty thousand Kazakhstani tenge) (at USD/KZT rate 514.65 as of 9.12.24)
Exchange	Astana International Exchange (AIX)
Coupon rate	5.65%
Use of proceeds	100% of proceeds from CBI-certified green bonds were allocated in full to finance a bank loan transaction associated with the project "Construction of the "Khromtau" Wind Power Plant (WPP) with a capacity of 150 MW" The borrower and project owner is JSC "Kazakhstan Aluminium Smelter" (JSC "Kazakhstan Electrolysis Plant")

AIFC GFC post-issuance verification summary

UTILISATION OF PROCEEDS. The Nominated and Financed Eligible Project for the use of proceeds: Construction and commissioning of a 150 MW Wind power plant <u>Khromtau</u> project, Aktoke region, Kazakhstan – is aligned with the Climate Bonds Standard Version 4.2 and the sector-specific Wind Sector Eligibility Criteria. 100% of net proceeds from the Certified Climate (Green) Bond issued by DBK in <u>December</u>, 2023, were allocated in full to finance a bank loan transaction associated with the said project. GFC considers that investments in the eligible Nominated and financed project will lead to positive environmental impacts and help in reducing Kazakhstan's contribution to climate change. PROJECT EVALUATION AND SELECTION. DBK established and follows a process for green project selection and evaluation carried out in accordance with the Bank's internal regulations on review, financing, monitoring and implementation of investment projects, and with its Green and Sustainability Financing Framework (Framework). In line with the Framework, responsible structural units submitted to the Credit Committee materials and a nomination conclusion on the compliance of the project in question with green project categories and criteria with reference to CBS and Sector Eligibility Criteria. GFC considers that the project selection process is aligned with the Climate Bonds Standard Version 4.2 in terms of establishing, documenting, and maintaining a decision-making process to determine the eligibility of the Nominated projects and assets. MANAGEMENT OF PROCEEDS. Allocation of DBK's Certified Green Bond proceeds is accounted for through a special off-system sub-account "Green Bonds" (in Excel) for separate accounting and control of Green and Sustainability Bond use of proceeds. The Bank has identified a structural unit responsible for organizing, ensuring, and implementing an effective Green Bond management process to account for the sub-account, as well as to maintain a Registry of green projects tracking projects financed with green bond proceeds, including Certified bonds. GFC considers that the management of proceeds is aligned with the Climate Bonds Standard Version 4.2 in terms of tracking of proceeds, <u>Managing</u> unallocated proceeds, Earmarking funds to Nominated projects and assets, as well as documenting and disclosing the related processes to the verifier. REPORTING. The Issuer adopted a Green Bond Framework (later revised and renamed to Green and Sustainability Financing Framework to extend to social and sustainability financing beyond green bonds) and made it available prior to issuance. In line with green bond disclosure requirements set in the Framework, the Bank has provided and made publicly available an annual report on issued Certified Green Bonds and intends to provide further annual update reports from the date of issue until full repayment and in case of any significant changes, covering a report on the allocation of proceeds and a report on the environmental impact of each project. The nominated project identified for the Certified green bond was disclosed in the Bond Prospectus and the pre-issuance Assurance report. GFC considers that the reporting processes are aligned with the Climate Bonds Standard Version 4.2 in terms of disclosing Nominated Projects invested in, the intended approach to providing update reports to reaffirm conformance with the Framework, as well as external review aspects.	<table><tr><td>Issuing Entity</td><td>Development Bank of Kazakhstan JSC</td></tr><tr><td>Issuer Group (if different from above)</td><td></td></tr><tr><td>Date of Green Bond Framework of Issuer</td><td>Green Bond Framework adopted on February 1st, 2022 (#5/22) by Management Board, as amended on November 21st, 2022, (#85/23) Revised Green and Sustainable Financing Framework as renamed and approved on June 3rd, 2024</td></tr><tr><td>Approved Verifier Firm</td><td>AIFC Green Finance Centre Ltd. (GFC)</td></tr><tr><td>Signatory of the audit opinion</td><td>Manas Gizhduaniyev, CEO</td></tr><tr><td>Email address in relation to this report</td><td>Greenfinance@aifc.kz; M.Takhanova@aifc.kz</td></tr><tr><td>Debt Instrument Type(s)</td><td>Bond</td></tr><tr><td>Debt Instrument(s)/Program Name</td><td>Green Bond</td></tr><tr><td>Refinancing/Financing new projects</td><td>100 % of allocation of proceeds to financing new projects</td></tr><tr><td>Period over which proceeds are allocated</td><td>1 year</td></tr><tr><td>Size of Debt Issuance</td><td>15 <u>mln</u> USD</td></tr><tr><td>Debt Issuance and Maturity Dates</td><td>22 December 2023 22 December 2024</td></tr><tr><td>Sector Criteria governing the Project/Assets be financed</td><td>Wind Sector Eligibility Criteria of the Climate Bonds Standard & Certification Scheme</td></tr><tr><td>Adaptation & Resilience Requirements</td><td>N/A</td></tr><tr><td>Project/Assets financed</td><td>Bank loan transaction to finance: Construction and commissioning of a Wind power development project with a total installed capacity of about 150) MW, near the city of <u>Khromtau</u>, Aktoke region, Kazakhstan (<u>Khromtau</u> Wind Power Plant)</td></tr><tr><td>Assurance Opinion</td><td>Limited</td></tr><tr><td>Assurance Standard</td><td>ISAE3000</td></tr><tr><td>Period over which the verification work was conducted</td><td>1 month</td></tr><tr><td>Date of Issuance of Verification Report</td><td>December 20th, 2024</td></tr></table>	Issuing Entity	Development Bank of Kazakhstan JSC	Issuer Group (if different from above)		Date of Green Bond Framework of Issuer	Green Bond Framework adopted on February 1 st , 2022 (#5/22) by Management Board, as amended on November 21st, 2022, (#85/23) Revised Green and Sustainable Financing Framework as renamed and approved on June 3rd, 2024	Approved Verifier Firm	AIFC Green Finance Centre Ltd. (GFC)	Signatory of the audit opinion	Manas Gizhduaniyev, CEO	Email address in relation to this report	Greenfinance@aifc.kz; M.Takhanova@aifc.kz	Debt Instrument Type(s)	Bond	Debt Instrument(s)/Program Name	Green Bond	Refinancing/Financing new projects	100 % of allocation of proceeds to financing new projects	Period over which proceeds are allocated	1 year	Size of Debt Issuance	15 <u>mln</u> USD	Debt Issuance and Maturity Dates	22 December 2023 22 December 2024	Sector Criteria governing the Project/Assets be financed	Wind Sector Eligibility Criteria of the Climate Bonds Standard & Certification Scheme	Adaptation & Resilience Requirements	N/A	Project/Assets financed	Bank loan transaction to finance: Construction and commissioning of a Wind power development project with a total installed capacity of about 150) MW, near the city of <u>Khromtau</u> , Aktoke region, Kazakhstan (<u>Khromtau</u> Wind Power Plant)	Assurance Opinion	Limited	Assurance Standard	ISAE3000	Period over which the verification work was conducted	1 month	Date of Issuance of Verification Report	December 20 th , 2024
Issuing Entity	Development Bank of Kazakhstan JSC																																						
Issuer Group (if different from above)																																							
Date of Green Bond Framework of Issuer	Green Bond Framework adopted on February 1 st , 2022 (#5/22) by Management Board, as amended on November 21st, 2022, (#85/23) Revised Green and Sustainable Financing Framework as renamed and approved on June 3rd, 2024																																						
Approved Verifier Firm	AIFC Green Finance Centre Ltd. (GFC)																																						
Signatory of the audit opinion	Manas Gizhduaniyev, CEO																																						
Email address in relation to this report	Greenfinance@aifc.kz; M.Takhanova@aifc.kz																																						
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Case study: post-issuance verification

First CBI-certified green bond in Kazakhstan

AIFC GFC post-issuance verification summary

Checklist Question	Verification activity	Findings	Conclusion on Compliance with Requirement
Nominated projects and assets must meet the eligibility requirements provided in the relevant Sector Criteria documents applicable at the time of certification.	Document review, Interview	Project Bank loan to finance the Construction and commissioning of a Wind power development project with a total installed capacity of about 150 MW (Khromtau Wind Power Plant) The environmental effect of the Khromtau WPP Project: annual avoided greenhouse gas emissions in the amount of 366,501 tCO₂ per year. The P90 factor was used to correlate the annual output. Annual output is expected to be 592 757MWh x 0.9 = 533 481 MWh. Given the projected electricity output by the Khromtau WPP of 533 481 MWh /year and based on the national Combined Margin Grid Emission Factor of 698 g CO₂/kWh, or 0,698 tCO₂/ MWh (for Kazakhstan), the annual greenhouse gas (GHG) emissions avoided can be expected to be 533 481 MWh x 0,698 tCO₂/MWh = 372 370 tCO₂. However, since, according to IPCC, the average life-cycle CO₂ equivalent emissions for onshore wind power plants themselves is 0,011t CO₂ equivalent/MWh, the annual adjusted GHG emissions avoided are expected to be 533 481 MWh x (0,698- 0,011tCO₂)/MWh = 366 501 tCO₂.	Compliant with the requirement
WIND SECTOR ELIGIBILITY CRITERIA of the Climate Bonds Standard Wind energy assets relate to: • The establishment, acquisition, expansion, and/ or ongoing management of a specified onshore wind energy facility. • The establishment, acquisition, expansion and/ or ongoing management of related inputs and infrastructure to support these facilities. These assets are eligible for inclusion in a Certified Climate Bond if they meet: Onshore wind energy generation facilities are Automatically eligible		GFC verified the procedure used by DBK to identify, check, review and include loans on the basis of their use of proceeds. GFC assures the procedure for selecting the eligible assets: Bank loan to finance the Construction and commissioning of a Wind power development project with a total installed capacity of about 150 MW (Khromtau Wind Power Plant) GFC assures that based on the verification procedures undertaken, the use of proceeds is compliant with the CBI Wind Sector Criteria, and the onshore wind energy generation facilities considered are Automatically eligible.	

Environmental effect of Khromtau Wind Power Plant Project: annual avoided GHG emissions in the amount of **366,501 tCO₂** per year



THANK YOU!

AIFC GREEN FINANCE CENTRE

Your Partner in Sustainable
Finance & ESG Excellence

Contacts:

e-mail: a.zhakupova@aifc.kz
greenfinance@aifc.kz

Web-site: <https://gfc.aifc.kz/en>

