

KDB Sustainable Bond Framework

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CONTENTS

- 1. Overview of Korea Development Bank
- 2. KDB's Vision of E&S Management
- 3. KDB Sustainable Finance Framework
 - 3.1 Use of Proceeds
 - 3.2 Process for Project Evaluation & Selection
 - 3.3 Management of Proceeds
 - 3.4 Reporting
- 4. External Review

1. Overview of Korea Development Bank

Pursuant to the Korea Development Bank Act enacted in 1953, Korea Development Bank ("**KDB**" / the "**Bank**") was founded by the government of Republic of Korea (the "**Government**") in 1954 as a policy bank with a mandate to reconstruct the post-war Korean economy. The Government wholly owns shares of KDB. Capital injected by the Government totals KRW17.4 trillion (equivalent to approximately US\$15.3 billion) as of the first quarter-end of 2019, while the authorized capital of KDB amounts to KRW 30 trillion.

Since its establishment, KDB has led the domestic banking industry with respect to supplying and managing industrial capital in order to facilitate the development of Korean industries and the national economy. While serving as a policy bank to implement the Government's policy, KDB has built up a body of knowledge in diverse financial products and has expanded its financial business areas and territories. KDB's main business areas consist of 1) corporate banking, 2) investment banking, 3) corporate restructuring and 4) consulting & research. KDB has 23 overseas networks by the first quarter-end of 2019 in the forms of branches, subsidiaries or representative offices and they take a part in the local financing businesses.

KDB's mandated roles strengthened by the Government are 1) providing financing for small-andmedium sized enterprises and start-up companies, 2) nurturing the growth engine of industry, public sector and infrastructure, 3) leading corporate restructurings to maintain a sound business environment and 4) supporting enhancement of domestic financing market stabilization. KDB continues to play its role as a policy bank to enhance domestic industry and national economy by actively participating in various financing activities domestically and internationally.

Based on its strategically important role as a policy financial institution and its strong linkage with the Government, KDB's credit rating is graded at par with the Government. The international credit ratings of KDB are currently at Aa2 (Stable), AA (Stable) and AA- (Stable) by Moody's, Standard Poor's and Fitch Ratings, respectively.

KDB nurtures the exchange with other international financial groups that are greatly committed to sustainability, through active participation in memberships such as UN Global Compact (UNGC), the International Development Finance Club (IDFC) and Equator Principles Association. Further, KDB takes part in Green Climate Fund (GCF) as an accredited entity to carry out the GCF-funded projects and ultimately to facilitate sustainable growth in the global community.

Equator Principles http://www.equator-principles.com/index.php/members-and-reporting

United Nations Global Compact <u>https://www.unglobalcompact.org/what-is-gc/participants/5887-Korea-Development-Bank</u>

International Development Finance Club https://www.idfc.org/Who-We-Are/members.aspx

Green Climate Fund (KDB acts as an accredited entity elected by GCF in 2016) <u>http://www.greenclimate.fund/partners/accredited-entities/ae-directory</u>

2. KDB's Vision of Environmental and Social Management

KDB is committed to promoting the concept of sustainable development. KDB's promotional activities are to help its partners and borrowers achieve their development goals. While complying with the applicable laws and regulations of the jurisdictions, in which a project is being undertaken and laws implementing host country obligations under international laws, KDB follows internationally recognized environmental and social standards.

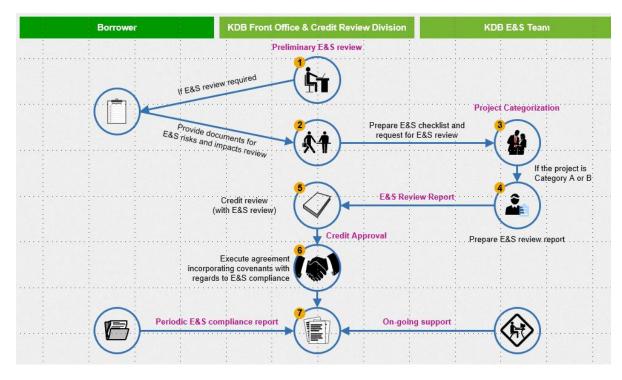
KDB's Environmental and Social ("**E&S**") framework follows a thorough review process and procedures, in order to i) better articulate its E&S policy to improve clarity, coherence, and consistency; ii) balance the differences between the initial plan of a project and actual outcome after execution of the project; iii) adapt policy implementation to an evolving range of different partners with varying capacities; and (iv) improve internal processes and resource allocation.

KDB's E&S framework adopts more integrated and strategic approaches and encompasses E&S safeguards process to manage E&S risk throughout the life cycle of a project. The objectives of the safeguards are to (i) avoid adverse impact of projects on the environment and affected people, where possible; (ii) minimize, mitigate, and/or compensate for adverse impact on the environment and affected people when avoidance is not possible; and (iii) ensure its stake-holders (i.e. borrowers, partners, employees, any counterparts) manage E&S risks. In 2018, KDB integrated various E&S related internal policies into one guideline (called "Guideline of E&S Review and Management") to facilitate consistency in application across the bank.

In January 2017, KDB adopted the Equator Principles ("EPs") which reaffirms its commitment towards sustainable finance and demonstrates a substantial progress in integrating international best practices into its fast-growing project financing business to ensure that projects are developed in a socially responsible manner and reflect sound environmental management practices. In accordance with adopting EPs, KDB instituted an integrated internal policy (called "E&S Review and Management Guideline") to apply the principles to daily bank operations in general.

In 2017, KDB made a memorandum of understanding with two Korean agencies ("Korea Social Enterprise Promotion Agency" and "Korea Environmental Industry & Technology Institute") for the purpose of proliferation of enterprises' social responsibility and financial support for social value-enhancing enterprises, excellent environment-related enterprises and promising social enterprises.

KDB will continue its efforts to introduce and implement sustainable finance and enhance social responsibility of financial industry with a goal of balanced economic, environmental and social development.



KDB's E&S safeguard under Equator Principles (EP)

Figure 1: Workflow of KDB's E&S Safeguard

The departments with different roles and responsibilities within the bank in relation to E&S review and management of a project

- Relationship Managers (RMs) originate transactions and hold the primary responsibility for applying the EPs to a project. RMs are on the front lines in working with the clients (borrowers), sponsors, lenders and consultants and ensure the project be in compliance with the EPs related matters during the life of the loans/projects.
- E&S Team under Business Planning Department is dedicated to assessing E&S risks associated with projects. Its principal role is categorizing E&S risk of projects and providing E&S review reports that outline requisites for compliance with the EPs and required follow-up actions. The team also holds the responsibility for the bank's internal policy with respect to E&S matter and providing staff training.
- Credit Review Division & Senior Management (Credit Committee) E&S review reports prepared by the E&S team forms an essential part of the credit approval documents, enabling the Credit Review Division and the bank's approval authorities including Credit Review Committee (composed of the bank's top management) to take into account E&S risks on decision-making.

3. The KDB Sustainable Bond Framework

The KDB's Sustainable Bond Framework (the "**Framework**") is set up based on 1) the Green Bond Principles, 2) the Social Bond Principles and 3) the Sustainability Bond Guidelines ¹ ("**Market Standards**").

KDB intends to issue Green, Social and/or Sustainability Bonds ("**Bonds**") under the Framework, in order to finance and/or refinance projects which promote climate mitigation, adaptation and/or sustainable societal development.

The Framework is consisted of four core components: 1) Use of Proceeds 2) Process for Project Evaluation and Selection 3) Management of Proceeds, and 4) Reporting.

3.1 Use of Proceeds

Proceeds from any KDB Green Bonds will exclusively be used to finance and/or refinance projects under the Eligible Green Categories defined as the below;

Proceeds from any KDB Social Bonds will exclusively be used to finance and/or refinance projects under the Eligible Social Categories defined as the below;

Proceeds from any KDB Sustainability Bonds will be used to finance and/or refinance a combination of projects under the Eligible Green and Social Categories (collectively referred as "Eligible Projects").

Eligible Green Categories		
Renewable Energy	 Development, Construction of or production transmission of energy from renewable sources; Solar, Geothermal (<100g CO₂/kWh), Hydro (<25MW), Marine, Wind Bio energy (<100g CO₂/kWh) converted from biological resources² Energy from waste materials (<100g CO₂/kWh) Exclusion: fossil fuels such as petroleum, coal, natural gas; and nuclear power related projects 	
Clean Transportation	 Low-carbon transportation including electric or hydrogen-powered cars, electric-powered rail, non-motorised, multi-modal transportation and the related infrastructures Marine vessels which use electric propulsion, hydrogen or equipped with propulsion systems using LNG, LPG and methanol; except if the vessel is dedicated to the transportation of fossil fuel; provided that eligible vessels shall be aligned with the IMO established targets to achieve 40% CO₂ reduction by 2030 	

Eligible Criteria

¹ Published by the International Capital Market Association ("ICMA")

² The biological resources used for biomass will (i) be derived from source that do not compete with food production, (ii) not be grown in areas with currently or previously high in biodiversity and (iii) not decrease carbon pools in soil

Energy Efficiency	• Energy storage systems, smart grids, appliances and products (such
	as LED smart module and lightings technology) in new and
	refurbished buildings having 30% minimal energy savings /
	improvement in energy efficiency
Pollution Prevention	Subject to exclusion of fossil fuel related activities; the development
and Control	and/or construction of
	Facilities and technologies for preserving or restoring natural
	landscape (including soil remediation) or preventing soil
	contamination
	• Facilities for preventing air pollution (control of fine dust, reduction of nitrogen oxide, etc.)
Sustainable Water	Development and/or purchase of
Management and	• Sustainable Infrastructure for wastewater treatment and to improve
wastewater	efficiency in providing clean and/or drinking water
management	• Technology for recovering hydro-ecological environments (e.g. river
	restoration)
	Development and/or construction of
	Facilities for preventing water pollution (e.g. Wastewater
	treatments, infrastructure for water quality improvements
Eligible Social Catego	pries
Employment	Subject to the SME ³ Exclusion List in Appendix, loans to SMEs with \leq 300
Generation	employees and falling under following categories:
	• Outperforming job-creating companies certified by the central or
	local governments
	• Employment-expanding companies receiving tax benefits (e.g.
	companies that expand employment of women on career break due
	to childbirth and childrearing, young starters, or the disabled and/or
	employment in underdeveloped regions)
Social Enterprises	Subject to the SME Exclusion List in Appendix:
Social Enter prises	 Social enterprises defined in the article 2.1 of "Social Enterprise
	Promotion Act" ⁴
	Preliminary social enterprises ⁵ certified by the head of local government or head of an administration department of central
	government or head of an administration department of central
	government

³ Small and medium sized enterprises according to Article 3 of the Enforcement Decree of the Framework Act on Small and Medium Enterprises, link: https://www.mss.go.kr/site/eng/02/10205000000002019050902.jsp

⁴ The term "social enterprise" means an entity certified as prescribed in Article 7 to be the one that pursues a social objective aimed at enhancing the quality of life of community residents by providing vulnerable social groups with social services or job opportunities or by contributing to the communities while conducting its business activities, such as the manufacture or sale of goods and services;

The term "vulnerable social group" means a group of people who suffer hardships in purchasing needed social services at market prices or are confronted with particular difficulties in getting a job under ordinary conditions of the labor market, for whom further detailed criteria shall be prescribed by Presidential Decree;

⁵ The business scope of preliminary social enterprises is same as that of the social enterprises but some factors of the preliminary social enterprise to be certified as a social enterprise by the Social Enterprise Promotion Act has yet to meet conditions required by the Act. Both of social enterprises and preliminary social enterprises shall be registered with a governmental agency, Korea Social Enterprise Promotion Agency, link: http://socialenterprise.or.kr/eng/index.do

In addition, Eligible Projects should:

- Be aligned with the relevant laws of Korea⁶ and the international guidelines;
- Be: (i) existing projects financed during the two years preceding the issue date of the bonds (ii) projects committed prior to the issue date but financed following the issue date and (iii) projects committed to be financed after the issue date.

3.2 Process for Project Evaluation & Selection

KDB's Business Planning Department is responsible for 1) setting E&S related policies, 2) annually providing (x) the guideline of fund-supply to certain industry and corporations including green & social industry and corporations and (y) criteria of green & social industry in line with Korean laws (such as (but not limited to) 1) The Framework Act On Low Carbon, Green Growth, 2) The Act On The Promotion Of The Development, Use And Diffusion Of New And Renewable Energy And 3) Social Enterprise Promotion Act.

KDB's business initiative is in line with Korean government's policy and KDB as a policy bank has instituted means to promote sustainable financing at the operational level by including the volume of sustainable financing as one of the annual performance indicators.

The Business Planning Department annually establishes budget of fund-supply and the business units (such as Project Finance Division, Corporate Banking Division, SME Banking division, etc., so called "RMs"; "Relationship Managers") select projects or business falling under the target industry and/or corporations, which are captured in KDB's internal IT system as the RMs register the projects/the new business into the system.

The evaluation on the project/the new business starts with preliminary assessment of E&S risk and impact of a proposed project. Based upon the external E&S impact assessment report, the RMs fills in the E&S survey of the project and requests E&S Team to assign a category⁷ of the project into A/B/C that reflects the magnitude of risk and impacts.

For credit approval on the proposed project submitted by the RMs, KDB's Credit Review Division reviews whole matters including the appropriateness of mitigation measures to deal with identified E&S impacts, based on the E&S review report prepared by the E&S Team. The E&S review report can be prepared by external professional consultants, if necessary and as appropriate, upon the request of E&S Team in order to test the borrower's ability to comply with the EPs. KDB's Credit Committee meeting is held to approve the proposed project. Covenants such as compliance with regulations related to the E&S matters, fulfillment to mitigate any possible E&S impact; and any request by E&S Team shall be included into the loan agreements.

⁶ 1) The Framework Act On Low Carbon, Green Growth, 2) The Act On the Promotion Of The Development, Use And Diffusion Of New And Renewable Energy (For Green Bond) And 3) Social Enterprise Promotion Act (For Social Bond)

⁷ KDB's categorization system is based on its experience as well as the analysis of IFC's Performance Standards and the Environmental, Health, and Safety guidelines as technical reference with general and industry-specific examples of Good International Industry Practice.

Upon the credit approval, the RMs requests KDB's Treasury Department through bank's proprietary information system to finance the project. If the project initially meets the eligibility criteria for sustainable finance, the Treasury Department reviews the credit approval memo for details of approved project and, pre-assesses, in consultation with an external specialist, the environmental or social impact and improvement from the project improves E&S and determines whether to allocate the proceeds of the Bonds to the project.

For surveillance of the approved projects, the RMs will periodically receive the E&S compliance report from the borrower and, if necessary, request the external third party's monitoring report of the project.

3.3 Management of Proceeds

The proceeds of the Bonds will be managed by KDB's Treasury Department. Upon receipt of eligible projects for the use of proceeds through KDB's internal information system, the Treasury Department will allocate the proceeds to the projects in accordance with the financing schedule of the projects. For the eligible projects that have been already financed and/or will be refinanced, it will earmark those projects as using the proceeds of the Bonds.

KDB's Treasury Department will periodically inquire the RMs about drawdown of funds to the eligible projects if the proceeds of the Bonds are not fully allocated.

Pending/unallocated proceeds of the Bond will be invested in cash, cash equivalents and/or marketable securities, in accordance with KDB's cash management policies.

3.4 Reporting

KDB will provide an annual "Investor Newsletter" with the information of allocation of the proceeds of the Bonds. The report shall be posted to KDB's official website.

The Investor Newsletter will include following information:

- Allocation information by Eligible Project Category;
- The total amount allocated to the Eligible Projects;
- Remaining unallocated proceeds;
- Estimated environmental and/or social impact from the project that proceeds are allocated to; and
- Project example(s), if feasible.

Eligible Project	Impact Indicator	
Category		
Eligible Green Categories		
Renewable Energy	Annual energy production in MWh	
	• CO ₂ emissions avoided equivalent avoided per year and/or	
	per USD million Green Bond	
Clean Transportation	Length of new track built	

	Built passenger capacity	
	• CO ₂ emissions avoided equivalent avoided per year and/or	
	per USD million Green Bond	
Energy Efficiency	Amount / percentage of energy savings annually	
	• CO ₂ emissions avoided equivalent avoided per year and/or	
	per USD million Green Bond	
Pollution Prevention	• Reduction in fine particulate PM10, PM2.5 or other air	
and Control	pollutants emissions (in tonnes)	
	• Area of remediated land (sqm) / Amount of remediated soil	
	(tonnes)	
Sustainable Water	• Additional clean water supply (million m ³)	
Management and	Number of additional people and cities served	
Wastewater	• Amount of wastewater treated (million m ³)	
Management	Decrease of pollution concentration	
Eligible Social Categories		
Employment	Number of job created and/or preserved	
Generation	Number of small and medium corporations financed	
Social Enterprises	Number and type of disadvantageous beneficiaries	

4. External Review

4.1 Second Party Opinion

KDB has obtained a second party opinion from an independent third party to confirm the alignment of the KDB Sustainable Bond Framework with the Market Standards. The second party opinion will be available on KDB's official website.

4.2 Compliance

KDB will ensure that Eligible Projects are in compliance with KDB's environmental and social safeguards during the life of the projects and that any measures to avoid/minimize environmental and social risks may be incorporated into a legal agreement. If any matters arise from the projects, the borrowers of the projects shall take corrective actions in accordance with the relevant legal agreement.

Appendix: SME Funding Sectoral Exclusion List

KDB will not allocate the Proceeds to SMEs in the sectors or industries that are considered to have potential negative social or environmental impact. Such exclusionary list includes but not limited to the following:

- 1. Businesses involved in fossil fuel exploration and distribution
- 2. Businesses involved in trade and production of conflict minerals
- 3. Businesses involved predatory or payday lending
- 4. Businesses involved in the production of palm oil
- 5. Production or trade of alcoholic beverages (excluding beer and wine)
- 6. Production or trade of tobacco products
- 7. Production or trade of nuclear fuel
- 8. Production or trade of weapons, ammunition and military fighting vehicles
- 9. Gambling related activities
- 10. Businesses or activities that have a record of engaging in illegal business practices
- 11. Businesses or activities that are involved in forced labour and/ or child labour
- 12. Businesses or activities that involve in activities or products that are deemed illegal under local laws or regulations or international conventions and agreements, and/or subject to international phase-outs or bans
- 13. Businesses or activities that are involved in the production, distribution or storage of hazardous chemicals and radioactive materials
- 14. Businesses or activities that are involved in the production, distribution or storage of pornography and/or prostitution