MOODY'S RATINGS

Financial Institutions

ASSESSMENT
14 May 2025

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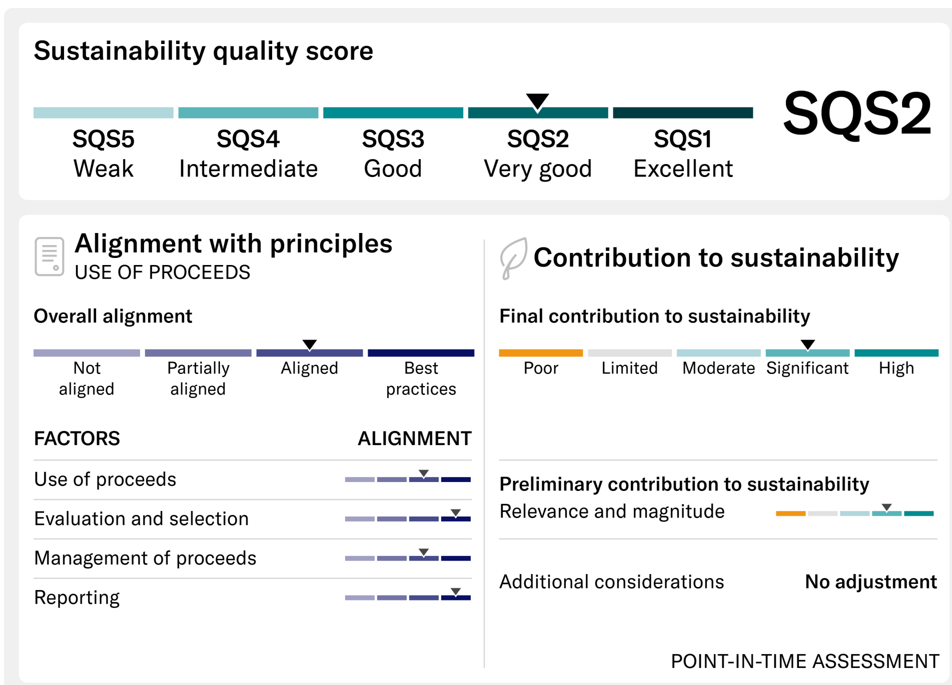
Korea Development Bank

Second Party Opinion – Sustainable Financing Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to Korea Development Bank's (KDB) sustainable financing framework, dated May 2025. The bank has established its use-of-proceeds framework with the aim of financing projects across seven eligible green categories and five eligible social categories. The framework is aligned with the four components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (including the June 2022 Appendix 1), Social Bond Principles (SBP) 2023 and the Sustainability Bond Guidelines (SBG) 2021, and the Loan Market Association, Asia-Pacific Loan Market Association and Loan Syndications & Trading Association's (LMA/APLMA/LSTA) Green Loan Principles (GLP) 2025 and Social Loan Principles (SLP) 2025. The framework demonstrates a significant contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of KDB's sustainable financing framework, including the framework's alignment with the ICMA's GBP 2021 (including the June 2022 Appendix 1), SBP 2023 and SBG 2021, and the LMA/APLMA/LSTA's GLP 2025 and SLP 2025. Under the framework, the bank plans to issue use-of-proceeds sustainable finance instruments to finance projects across seven green categories and five social categories, as outlined in Appendix 3 of this report.

Our assessment is based on the last updated version of the framework received on 13 May 2025, and our opinion reflects our point-in-time assessment[1] of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

We produced this SPO based on our Assessment Framework: Second Party Opinions on Sustainable Debt, published in March 2025.

Issuer profile

Korea Development Bank (KDB) is Korea's leading state-owned policy bank, created to promote economic growth and industrial development of the country. Its primary goal is to provide financing to key industries, support major infrastructure projects, and assist in corporate restructuring efforts for national economic stability. Over time, KDB has also expanded into corporate and investment banking activities, offering corporate and individual customers with a wide range of financial products and services, including corporate finance, deposit taking, bonds, investment finance, derivatives and asset management. As of 30 June 2024, KDB operated through 60 domestic branches, 11 international branches, seven foreign subsidiaries and seven overseas representative offices.

KDB's principal environmental risks stem from its exposure to carbon transition risks through sectors such as manufacturing, transportation, and real estate, given the bank's policy role to support industrial sectors as well as companies undergoing restructuring in Korea.

Strengths

» A majority of the proceeds under this framework will be allocated towards projects that could contribute to significant reductions in greenhouse gas (GHG) emissions, namely solar power, wind power and zero-emission vehicles

» Robust environmental and social (E&S) risk management process in place to identify and mitigate negative E&S impacts associated with projects

» Transparent project evaluation and selection process with clear exclusion criteria

Challenges

» Some eligible categories lack granular details on thresholds or specific assets to be financed

Alignment with principles

KDB's sustainable financing framework is aligned with the four core components of ICMA's GBP 2023 (including the June 2022 Appendix 1), SBP 2023 and SBG 2021, and the LMA/APLMA/LSTA's GLP 2025 and SLP 2025. For a summary alignment with principles scorecard, please see Appendix 1.

- [x] Green Bond Principles (GBP)
- [x] Green Loan Principles (GLP)
- [x] Social Bond Principles (SBP)
- [x] Social Loan Principles (SLP)
- [ ] Sustainability-Linked Bond Principles (SLBP)
- [ ] Sustainability Linked Loan Principles (SLLP)

Use of proceeds

Not aligned	Partially aligned	Aligned	Best practices
		▼	

Clarity of the eligible categories – ALIGNED

KDB has communicated the nature of the expenditures and the exclusion criteria for all eligible categories. The eligibility criteria for nearly all project categories have been defined; however, some categories lack specific technical thresholds and details on the types of projects, such as energy efficiency, pollution prevention & control, and affordable basic infrastructure. KDB has confirmed that eligible projects will be located worldwide.

Clarity of the environmental or social objectives – BEST PRACTICES

KDB has clearly disclosed the E&S objectives of the eligible categories within the framework. The bank has referenced the United Nation's (UN) Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories (see Appendix 2), and the objectives are coherent with these recognized international standards.

Clarity of expected benefits – ALIGNED

KDB has identified expected benefits for all eligible categories, and these are relevant based on the projects that are likely to be financed under each category. The benefits are measurable and will be quantified in the annual reporting. The bank has not committed to disclose the share of refinancing to investors prior to issuance. The bank has committed to a look-back period of no longer than three years from the time of issuance.

Process for project evaluation and selection

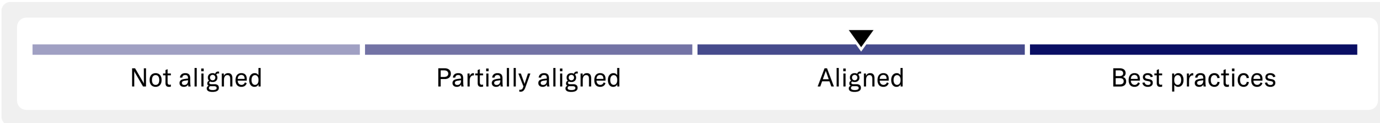
Not aligned	Partially aligned	Aligned	Best practices
			▼

Transparency and clarity of the process for defining and monitoring eligible projects – BEST PRACTICES

KDB has established a clear and structured process for selecting and evaluating eligible assets, as detailed in its framework which will be publicly disclosed. Relevant business units, including the project finance division, corporate banking division and small and medium-sized enterprise (SME) banking division are responsible for evaluating and selecting projects based on the eligibility criteria defined in the framework.

KDB will continuously monitor the compliance of financed projects with the eligibility and exclusion criteria throughout the life of the sustainable financing instrument. If a project no longer meets the eligibility criteria, the bank will reallocate the proceeds to other eligible projects. KDB has established an E&S risk management process to mitigate potential E&S risks, which is also publicly disclosed in the framework. E&S risks and impacts of projects and the adequacy of mitigation measures are evaluated prior to financing. Post-financing, the bank obtains annual E&S compliance reports from borrowers, and may request third-party monitoring reports where necessary.

Management of proceeds

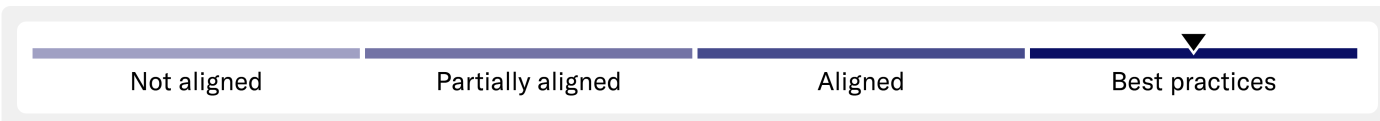


Allocation and tracking of proceeds – ALIGNED

KDB has defined a clear process for the management of proceeds in its framework, which will be publicly available. Net proceeds will be placed in a general treasury, tracked to ensure usage for intended purpose, and earmarked for eligible projects. The bank will adjust the balance of the tracked proceeds annually to match allocations to eligible projects. The bank aims to fully allocate net proceeds within three years from the date of issuance.

KDB has disclosed the intended types of temporary placements for unallocated proceeds as part of the framework. The bank has also confirmed that unallocated proceeds will not be invested in GHG-intensive or controversial activities.

Reporting



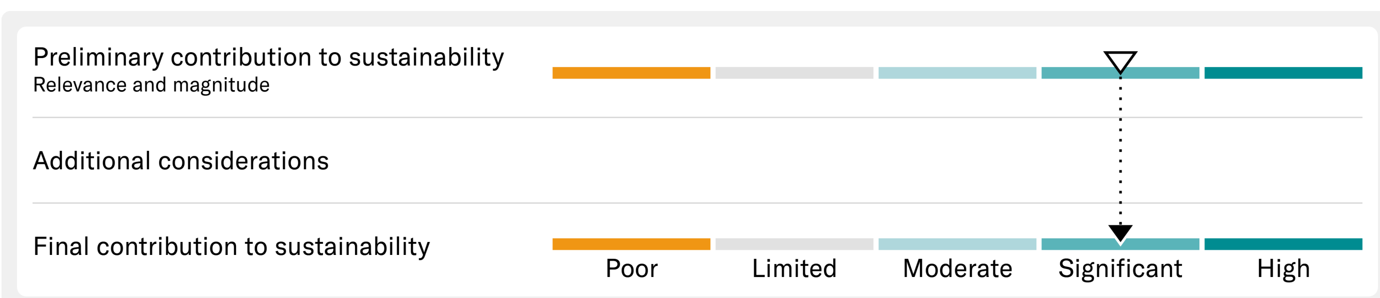
Reporting transparency – BEST PRACTICES

KDB will publish both allocation and impact reports annually until the maturity of the sustainable financing instruments, and on a timely basis in case of material developments to financed projects. The report will be publicly available on KDB's website and will include relevant information, such as total amount allocated by eligible category, the balance of unallocated proceeds, the share of proceeds used for refinancing, the expected E&S impacts of the eligible projects, and project examples.

KDB has identified and disclosed relevant E&S reporting indicators for each eligible category within its framework. KDB will disclose the reporting calculation methodology and assumptions used. The bank will also obtain independent verification on both allocation and impact reporting.

Contribution to sustainability

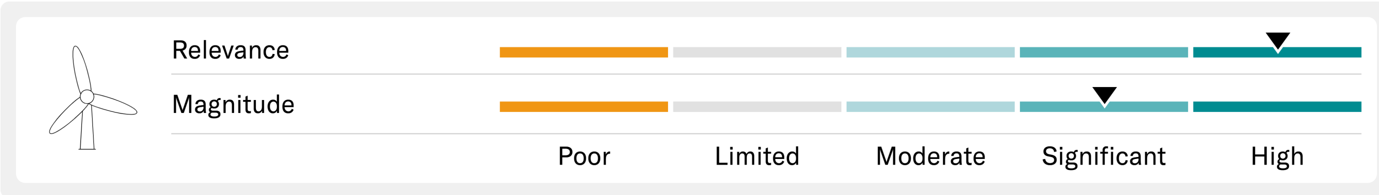
The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to sustainability score of significant, based on the relevance and magnitude of the eligible project categories, and we have not made an adjustment to the preliminary score based on additional contribution to sustainability considerations.



Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the eligible project categories. Based on information provided by KDB, we expect a vast majority of proceeds from forthcoming issuances will be allocated to the renewable energy and clean transportation categories. Projects may be situated globally. Therefore, unless otherwise specified, the relevance of eligible categories is assessed within a global context. A detailed assessment by eligible category has been provided below.

Renewable energy



The relevance of this category is high because the eligible projects are likely to substantially reduce GHG emissions by expanding renewable energy capacity, substituting the use of fossil fuels — which remains the dominant fuel source for several countries — with cleaner energy alternatives. The relevance of waste-to-energy projects could vary depending on the project location and the types of renewable energy options available in the country. Similarly for hydrogen projects, we lack visibility into the end-use applications of the manufactured hydrogen, and relevance of the projects could vary depending on the specific end-use. In terms of the relevance of the projects to the banking sector, banks play a critical role in channeling capital toward green projects to drive decarbonization efforts and promote green finance. As a policy bank supporting climate objectives, renewable energy projects are a key focus for KDB and wind and solar projects have accounted for a majority of the bank's financed green projects.

The magnitude of this category is significant, as we expect that most projects will provide long-term positive environmental impacts through the replacement of fossil fuels with clean energy sources. KDB has confirmed that an environmental and social impact assessment (ESIA) will be conducted for all eligible projects. This helps to mitigate the potential E&S externalities associated with eligible projects, such as for hydropower, concentrated solar power and offshore wind projects.

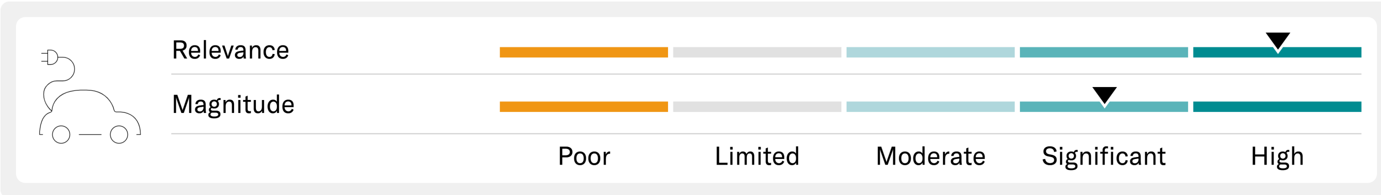
Eligible solar, wind, geothermal and marine energy projects are likely to generate highly positive long-term impacts on climate change mitigation. However, other projects under this category lack specific material thresholds. For bioenergy projects, KDB has confirmed that GHG emissions savings for biomass projects must be at least 80% compared with the relative fossil fuel comparator, which is in line with market best practice. However, corresponding thresholds have not been set for biogas and biofuel projects. Eligible feedstocks will exclude wood and all woody biomass, third generation biofuels and biodegradable municipal solid waste, including sewage sludge and food waste, which is also in line with market best practice. The feedstock must also not compete with food production, are not to be sourced from areas which are currently or previously high in biodiversity and must not decrease carbon pools in soil. However, KDB has not specified requirements around certification of agricultural feedstock. The bank has confirmed that methane leakage management plans are required for projects where methane leakage is identified as a material environmental risk.

For hydropower projects, while eligibility is limited to plants with generation capacity of less than 25 megawatts (MW), KDB has not established any eligibility thresholds for power density and GHG emissions intensity. Although we do not expect the inclusion of large-scale hydropower projects, projects involving the construction of artificial reservoirs with dams less than 15 meters in height are still eligible and such projects could entail significant negative E&S externalities, including implications on biodiversity and population displacement.

Waste-to-energy projects are also eligible under this category. Eligible projects must comply with Climate Bond Initiative's (CBI) waste management criteria for energy from waste, which helps to mitigate negative environmental impacts arising from projects. Financed projects must meet prescribed thresholds for plant efficiency, carbon intensity, bottom ash recovery and plant capacity. The projects must also adhere to the waste management hierarchy. While waste-to-energy projects can help reduce reliance on landfills, it remains the last option in the waste hierarchy before disposal.

For hydrogen production, while the means of hydrogen manufacturing will be limited to electrolysis of water using only renewable energy, there is no eligibility criteria for lifecycle GHG emissions intensity and we do not have visibility into the end use of the hydrogen to determine the full extent of the projects' contribution to the category's stated objectives.

Clean transportation

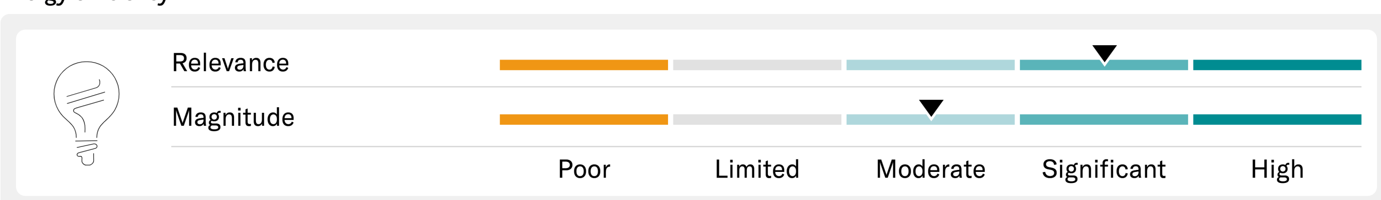


The relevance of this category is high as eligible projects will contribute to carbon emissions reduction and air quality improvement through the promotion of low-carbon transportation. According to the International Energy Agency (IEA), transport accounts for more than a third of carbon emissions from end-use sectors.[2] Additionally, energy efficiency improvement of vessels and adoption of low-carbon fuels is critical for the shipping sector as a 15% reduction in emissions from 2022 to 2030 is required for the sector's net zero by 2050 scenario.[3] This category is highly relevant to KDB due to the bank's role in directing funds towards expanding low-carbon transportation initiatives, which is also a key priority for the bank based on its outstanding green bonds portfolio.

The overall magnitude of this category is significant. KDB has confirmed that the majority of proceeds will be directed towards the low-carbon land transportation subcategory, which is limited to zero direct emission transportation modes. These are considered the best available technologies without significant lock-in effects. This category also includes the financing of transportation infrastructure, such as charging stations for electric vehicles (EVs). Although the positive short-to-medium term impact of EV charging stations will likely be less significant in locations where the electrical grid is still predominantly powered by fossil fuels, the projects will have a positive long-term environmental impact as grid decarbonization advances.

However, the category also includes the financing of vessels which may not be able to operate on zero-carbon fuels or fuels from renewable sources, which would lead to significant carbon lock-in. Dual-fuel vessels may also be financed, and KDB has not set requirements around the proportion of low-carbon fuels that will be used. While financed marine vessels must be aligned with the International Maritime Organization (IMO) established targets to achieve 40% CO_2 reduction by 2030, KDB has not established any eligibility thresholds relating to Energy Efficiency Design Index (EEDI), Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) requirements set by IMO. Thus, based on all of the factors above, marine vessel projects are likely to have a limited magnitude on a stand-alone basis. Vessels dedicated to the transportation of fossil fuels are not eligible, which reduces the risk of additional lock-in effects. KDB has confirmed that financing of marine vessels under this framework, if any, will be limited.

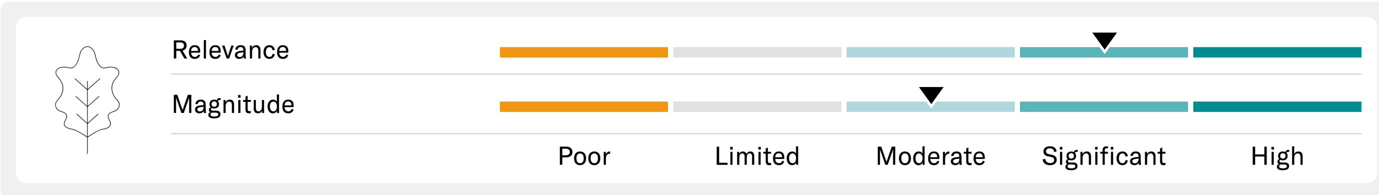
Energy efficiency



The relevance of this category is significant. Enhancing energy efficiency is critical for energy transition. Energy efficiency improvement is a key element in the shift towards more sustainable energy systems, often referred to as the “first fuel” of the global energy transition. Improving energy efficiency has been a focus for policymakers worldwide.[4] The overall significant relevance incorporates limited visibility into the function of financed energy storage systems and KDB’s relatively small exposure to energy efficiency projects.

The magnitude is moderate. All projects financed under this category are required to meet a minimum 30% energy efficiency improvement, adhering to market best practice. However, for energy storage projects, we lack visibility into the types of eligible energy storage systems and whether they are fully dedicated to storing energy generated by renewable sources. Furthermore, the category lacks comprehensive details on types of projects and sectors eligible for financing. Therefore, visibility into the extent to which a 30% reduction in energy consumption could promote the development of a low-carbon energy matrix is limited.

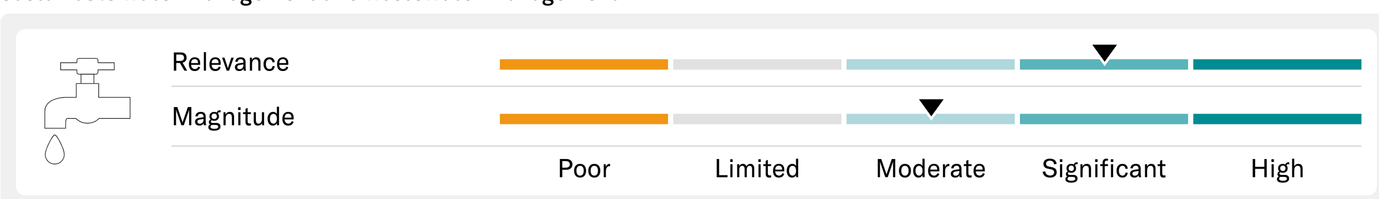
Pollution prevention and control



The relevance of this category is significant. Financed projects support reduction in pollution and the combatting of environmental degradation. Preserving natural landscapes is crucial as human activities have significantly altered the Earth's land, leading to biodiversity loss and soil degradation. Additionally, addressing air pollution is vital due to its severe health implications. Furthermore, promoting waste recycling is essential to reduce the demand for energy-intensive and environmentally damaging raw material extraction, allowing waste to be valued as a resource and preventing the occurrence of pollution from waste leakage. The overall significance of the category is lowered due to KDB's relatively small exposure to the eligible projects.

The magnitude of this category is moderate as projects under this category are likely to contribute to short-term pollution prevention and control objectives. Although we expect that eligible projects will provide environmental benefits through the restoration of natural landscapes and the reduction of air and soil pollution, initiatives centered on recycling and remediation, such as those within this category, are considered less advantageous than waste reduction and prevention efforts, which are prioritized more highly in the waste management hierarchy. Moreover, the lack of detailed information regarding eligibility thresholds and applicable technologies limits our ability to fully assess the potential E&S impacts of these projects. For example, for natural landscape restoration projects, KDB has not disclosed specific technologies and requirements with regards to soil health and biodiversity, to determine whether the most suitable remedial measures are being used. For air pollution prevention projects, no emission control thresholds have been defined. Although KDB has shared with us that it commits to ensuring that air pollution projects demonstrate quantitative improvements relative to a pre-project baseline, the required level of improvement is not specified. Similarly, for waste recycling projects, while KDB has shared that projects must comply with the waste hierarchy, KDB has not provided details on recycling methods or on minimum qualifying criteria such as recovery rates.

Sustainable water management and wastewater management

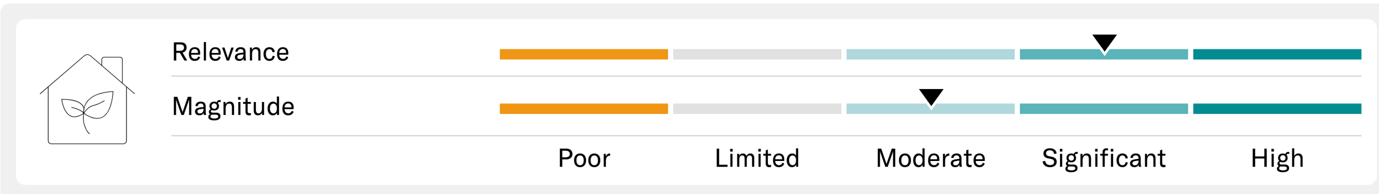


The relevance of this category is significant, as projects under this category will help to address global water-related risks. Currently, one-quarter of the world's population, residing in 25 countries, faces "extremely high" levels of baseline water stress, withdrawing over 80% of their annual renewable freshwater supply.[5] Developing countries are particularly impacted by water shortages, flooding and poor water quality. Up to 80% of illnesses in developed countries are linked to inadequate water and sanitation. In many countries, pollution or rising sea levels are contaminating water sources.[6] The overall significant relevance incorporates the lack of visibility into whether desalination projects will be located in areas facing high water stress, which constrains our ability to assess the appropriateness of such projects. Furthermore, KDB has a relatively small exposure to projects under this category.

The magnitude of this category is moderate, as projects under this category are likely to generate at least short-to-medium term positive environmental impacts on water and wastewater management. For water treatment projects, the thresholds for energy consumption and infrastructure leakage levels align with the relevant criteria under the EU Taxonomy. However, the methods for sludge treatment and requirements on monitoring and managing methane leakage for wastewater treatment projects have not been defined. For water supply projects, KDB has shared with us that projects must comply with relevant local water quality regulations. While KDB has shared that it will ensure that financed projects will result in a quantitative improvement water efficiency compared to a pre-project implementation baseline, the level of required improvement is not defined.

We also have limited visibility into the types of hydro-ecological recovery projects that can be financed, making it challenging to assess the potential negative externalities. ESIA will be conducted for all projects, which can help mitigate potential negative externalities. Desalination plants are also eligible under this category. Projects must be powered by renewable energy only, with power consumption below 2 kilowatt-hours per cubic meter (kWh/m^3), considered among the best available. However, KDB has not defined requirements on recovery ratio and brine management plans. This raises concerns over negative externalities on marine ecosystems and habitats. Nonetheless, this risk is partially mitigated by the conducting of ESIA.

Green buildings

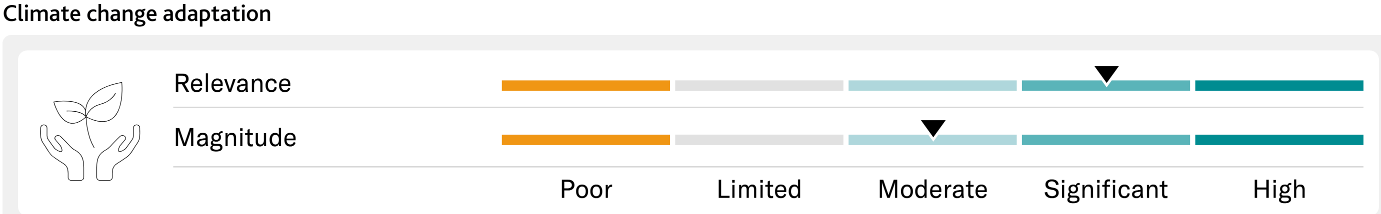


The relevance of this category is significant. Financing energy-efficient buildings plays an important role in global decarbonization, especially within the building sector — a primary consumer of energy and significant source of GHG emissions. Buildings are responsible for 30% of global energy use and 26% of energy-related emissions according to the IEA.[7] The significant relevance reflects the lack of visibility into data center locations, such as whether they will be in regions with high water stress, particularly since the eligibility criteria for data centers does not explicitly address water usage effectiveness (WUE). Additionally, the building sector is not specifically identified by KDB as a primary sector supported by its green lending.

We expect the eligible green building and data center projects will have a moderately positive impact on reducing building emissions. Eligible green building projects involve the construction or retrofitting of buildings that meet building certification levels of LEED Gold or above, BREEAM Excellent or above, and Korea G-SEED Level II or above. LEED Gold and above (together with a 30% improvement above the levels in ASHRAE 90.1) is recognized by CBI under its location specific criteria for commercial buildings. Studies also show that the G-SEED level II is similar to LEED Gold. However, the bank has not established additional energy efficiency thresholds for project eligibility, which may lead to varying levels of energy performance. The moderate score also reflects a lack of visibility into the breakdown between renovation of existing buildings and construction of new buildings. The latter involves greater negative externalities such as increased absolute energy consumption, high GHG emissions, and E&S risks associated with the construction phase.

Eligible data centers must meet a power usage effectiveness (PUE) threshold of 1.2 or below. Furthermore, KDB has shared with us that an operational PUE of 1.2 or below will also be required where data is available, and we expect that the requirement will be applied to existing data centers. An operational PUE of 1.2 or below is more ambitious than the global average of 1.56 in 2024 and exceeds the thresholds set by the Climate Neutral Data Center Pact (CNDCP), which we view positively. According to the CNDCP's Self Regulatory Initiative, new data centers operating at full capacity should meet an annual PUE target of 1.30 for data centers in cool climates and 1.40 for those located in warm climates. However, KDB has not shared the thresholds or criteria for other material aspects, such as water usage effectiveness, renewable energy usage, global warming potential of refrigerants and circular economy practices. Eligible data center projects are also not required to obtain building certifications which could help address these factors. Nonetheless, the stringent PUE required means that data center projects financed on a stand-alone basis are likely to exhibit a higher magnitude compared to eligible green building projects.

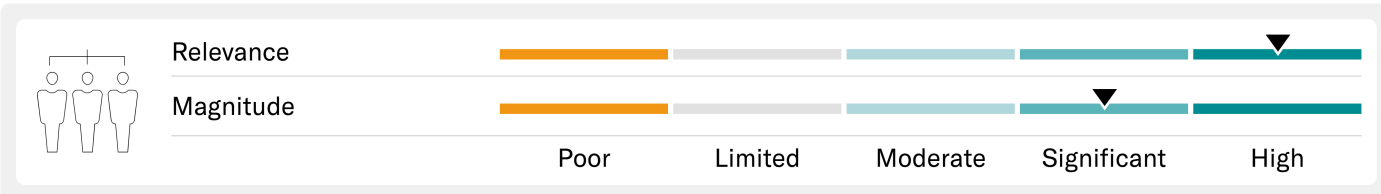
Climate change adaptation



The relevance of this category is significant as climate change is a critical issue globally. Since commercialization of climate change adaptation and mitigation projects are viable, the banking sector plays a critical role in channeling capital to enable adaptation efforts and to mitigate further risks and damages stemming from climate change. The significant relevance also considers KDB's relatively small exposure to climate change adaptation projects. Furthermore, KDB has not disclosed the locations of eligible projects, which limits our visibility into the local need for the adaptation measures.

Projects financed under this category will moderately contribute to climate change adaptation. Projects such as extreme weather and climate early warning systems are aligned with the CBI criteria. However, the possible inclusion of large-scale construction projects may inherently carry higher E&S risks. Although conducting ESIAs and adhering to local or international standards can partially mitigate these risks, the lack of detailed information on construction activities, eligibility criteria, and technologies limits visibility into the category's overall contribution.

Employment generation

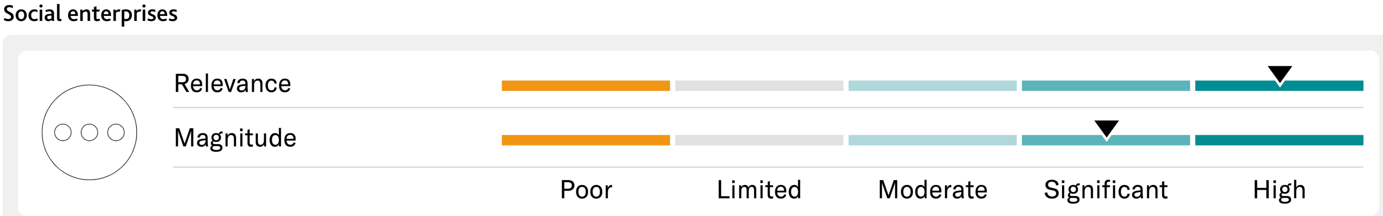


The relevance of this category is high. KDB has shared that eligible projects will be in Korea. SMEs play an important role in the Korean economy, accounting for nearly 99% of all businesses, 81% of total employment, and roughly 39% of exports[8]. However, SMEs in Korea lag behind large corporates in several aspects, with the productivity gap between large corporates and SMEs being one of the widest among OECD countries[9]. This category is highly relevant to KDB due to its role in channeling capital to SMEs and helping them generate more jobs and attract skilled workers across cities outside the capital. Furthermore, historically, KDB has allocated most of its social bond proceeds to employment generation projects, highlighting this category as a key priority for the bank amongst all eligible social categories.

The magnitude of this category is significant. Providing lending to SMEs will make a significant contribution to expanding access to financing for the target groups (SMEs which are certified outperforming job-creating companies, employment-expanding companies or startups by youths), all of which follow clearly defined criteria by the Korean government. KDB will report the number of jobs created or preserved to ensure the projects' impact on employment generation. The SMEs must demonstrate a proven track record of job creation or supporting employment for vulnerable groups, or the eligible lending should facilitate access to venture capital for startups to enable scaling, thereby achieving a more direct and significant impact on employment generation. Providing access to financing for outperforming job-creating companies and employment-expanding companies, as defined by the government, also support the government's policies to provide support for employment and livelihoods of vulnerable groups. KDB's Youth Startup Support Project aims to develop and strengthen the business capabilities of young entrepreneurs and support the growth of their businesses by providing mentorship and funding, thereby increasing youth employment.

While the Youth Startup Support Project directly supports capacity-building for business owners, the remaining two sub-categories lack details around their relevant capacity-building training programs. Additionally, we do not have visibility into how KDB will manage overindebtedness risk, particularly among borrowers with lower levels of financial literacy.

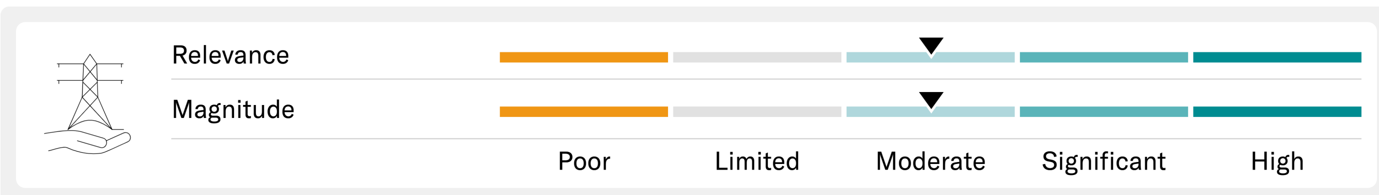
Social enterprises



The projects in this category are highly relevant. KDB has shared that eligible projects will be in Korea. Korea has experienced rapid economic growth, leading to significant income inequality and social disparities. Social enterprises focus on addressing social, environmental, or community challenges and aim to generate positive social impact, such as by creating employment opportunities for vulnerable populations, including low-income individuals, persons with disabilities, the elderly and other marginalized groups. Providing financing to social enterprises would enhance their capacity to support the employment of socially vulnerable groups.

The projects in this category will have a significant impact on expanding financial inclusion and promoting socioeconomic advancement and empowerment for vulnerable populations in Korea. These projects involve lending to social enterprises that aim to provide vulnerable groups with social services or job opportunities. The eligibility criteria and target populations for social enterprises align with government criteria and preliminary social enterprises are certified by the local or central government. Eligible social enterprises must be registered with the Korea Social Enterprise Promotion Agency (KoSEA), which was established to support the stable growth of social enterprises through financial subsidies, consulting programs, and business development assistance. KDB has shared that it intends to report the types of disadvantaged beneficiaries and the number of jobs created and preserved, ensuring that the impact of the projects will be directed towards the targeted social objectives. However, the broad application of general financing for the social enterprises limits our visibility into the extent to which these loans advance the targeted social objectives. Past projects supported by these loans have included financing social enterprises' purchases of production facilities and infrastructure needs, and development of new products.

Affordable basic infrastructure



The category's relevance is moderate. Access to basic infrastructure remains a key challenge globally, particularly in rural and remote areas where clean water and sanitation facilities, transportation infrastructure, stable electricity supply and telecommunications infrastructure vary significantly in quality and availability. Particularly in developing countries, access to basic infrastructure remains inadequate, and the poorest and most fragile countries pay the most for broadband, electricity, and transportation services[10]. The bank has confirmed that projects can be located worldwide, which limits our visibility into the necessity of the projects, although KDB will target areas with limited access to the essential services. Additionally, the provision of affordable basic infrastructure may not be a particularly material and relevant issue for the banking sector to address.

The overall magnitude of this category is moderate, primarily driven by the financing of electricity and telecommunications infrastructure projects. While projects under this category are likely to generate a positive impact, uncertainties remain regarding the broad target population and the means to ensure accessibility of the infrastructure to the most vulnerable populations.

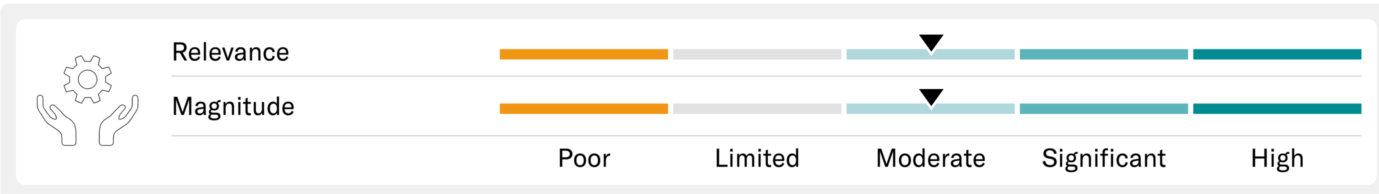
For telecommunications projects, KDB has shared that eligible projects will include infrastructure such as base transceiver stations (BTS), fourth generation (4G) or fifth generation (5G) network towers or other essential telecommunications infrastructure in areas where telecommunications or internet access do not exist or is substantially inadequate. When considered individually, some projects do not necessarily target or increase access to telecommunications or internet services for the vulnerable population, such as those focused on the construction of BTS infrastructure. We also have limited visibility into exact project locations to determine the level of internet access or mobile coverage of vulnerable populations. Service prices may not be affordable for the most underserved groups since prices are determined by network operators' pricing policies. Thus, projects within this subcategory are likely to have a limited overall contribution and a smaller potential positive impact compared to other eligible projects, such as those providing access to water and sanitation infrastructure.

For electricity projects, KDB plans to finance transmission and distribution (T&D) infrastructure to improve access to electricity. There are concerns around affordability, as KDB has not provided details on whether the electricity services would be affordable for vulnerable populations or if they will be provided at preferential or lower rates for rural areas. KDB has shared that T&D projects are not limited to connections with renewable energy sources, although, renewable energy sources will be prioritized. The lack of detailed project information also limits our ability to assess the quality of services.

For transportation infrastructure projects, the bank has shared with us that it will only finance free-of-charge roads that are open to the public. Toll roads, highways, bridges, ports, and airports construction are not eligible. Although such large-scale infrastructure projects are associated with negative externalities, the eligible projects can improve access and connectivity in areas where road connectivity does not exist or is substantially inadequate, likely leading to a long-lasting or structurally positive impact. KDB has communicated that the relevant environmental and social impacts will be assessed and managed. However, concerns remain regarding the broad target location and population, as well as potential negative externalities associated with these projects if the roads are used by fossil fuel-powered vehicles.

For water and sanitation projects, projects involving the provision of new access will be prioritized. All eligible projects must comply with local water or sanitation regulations and KDB will consider technical criteria, such as energy efficiency or leakage rate, where available. However, the specific technical requirements are not defined.

Access to essential services



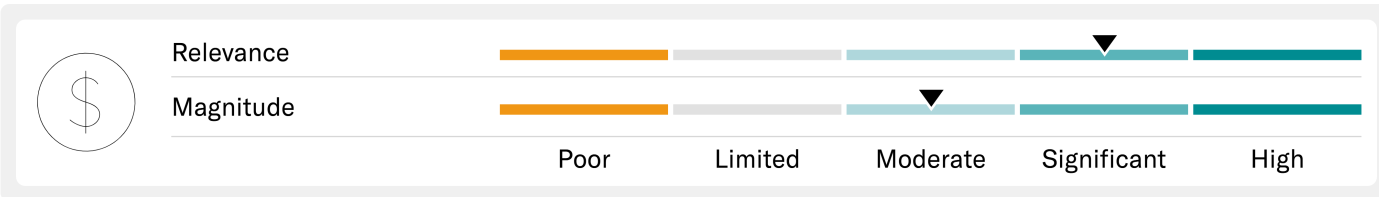
The relevance of this category is moderate. Access to quality healthcare and education remains a key global challenge, particularly in rural areas with inadequate facilities and urban areas facing overcrowding issues. Educational reform is also viewed as a priority due to limited access to quality education in remote areas, poor conditions in existing facilities, especially in developing countries, and inadequate resources. However, we lack information about the specific project locations and their corresponding needs. Projects are likely to be more relevant in developing countries and in less urbanized regions of developed countries. For instance, although Korea's access to high-quality healthcare and education is in line with other advanced economies and the country outperforms the average in education and health in the OECD Better Life Index[11], the concentration of such facilities in Seoul has exacerbated the urban-rural divide. This disparity is evident in the limited access to critical healthcare infrastructure in rural areas, further deepening socioeconomic inequalities. The overall moderate relevance also incorporates the consideration that the provision of essential services, such as construction of public hospitals or public education facilities, may not be as material and relevant for the banking sector to address.

The overall magnitude is moderate. While the projects in scope are likely to generate a positive impact on a global level, uncertainties remain regarding the broad target population and the quality of the financed projects.

For healthcare facilities, the bank plans to finance the construction and development of public or free healthcare and eldercare facilities. Eligible healthcare services must be free or subsidized, which expands financial accessibility for vulnerable groups. However, the target location and types of services have not been defined. In contrast to metropolitan cities, which have a high concentration of advanced healthcare infrastructure and ready access to emergency and specialized care, rural underserved areas face significant challenges, which highlights the importance of project location in assessing the impact of projects. Furthermore, KDB has not provided details on how it will assess the quality of eldercare or healthcare facilities during project selection. Similarly, for medical equipment and provision of diagnostic services, while KDB will finance projects relating to equipment and services which are offered free or at subsidized cost to end users, we have limited visibility into the types of services provided and the specific needs for the target population. For research and development (R&D) of affordable medicines, KDB has set clear eligibility criteria to include only those on the World Health Organization's (WHO) essential medicines list. While KDB aims to target underserved populations and areas, these are not specifically defined. This limits our visibility into whether the projects will serve the most vulnerable groups.

For education projects, KDB plans to finance public or free education, programs and childcare facilities, as well as public or free vocational and technical training facilities that promote employability through job skill courses. Similar to healthcare facilities, the target location is important for assessing the impact of projects because of different local needs. Additionally, public facilities will likely increase access for a larger proportion of the target population, but might still exclude the most vulnerable if there are small fees. While free facilities and programs could ensure the affordability of the education systems, we have limited visibility into the project details and the extent to which projects could address inclusion overall, as there are other important factors which could limit accessibility such as physical distance from schools. The bank has not confirmed whether education facilities will be developed in line with the relevant requirements set by local governments' education programs or ministries of education at the respective target project locations, and we lack visibility into the objectives and scope of eligible education programs, adding to concerns around quality. Furthermore, for student housing projects, we have limited visibility into whether the most vulnerable students will be targeted and the affordability of rental charges for these groups.

Socioeconomic advancement and empowerment



The relevance of this category is significant. Woman-owned enterprises or microenterprises often face greater challenges in accessing loans and other financial products due to perceived higher financial risks and social bias associated with these groups, resulting in these groups being financially underserved. Microfinance institutions provide financing to individuals who are unable to access loans from traditional banks due to high lending costs or requirements on income. While improving access to financial services would promote the financial inclusion of these target groups, this issue may not be as material for the banking sector to address.

The magnitude of this category is moderate. The bank will provide loans to woman-owned enterprises and microenterprises under this category. Woman-owned enterprises must meet the definition set by the International Finance Corporation (IFC), which helps ensure the loans are directed to woman-owned businesses or businesses with a greater representation of women in management or the board of directors. For loans to microenterprises, the businesses must comply with the definition of microenterprise set by the respective local government.

KDB has shared that it may offer favorable terms such as preferential pricing, simplified documentation requirements, and the removal of collateral requirements for microenterprises. However, we do not have visibility into the details to fully assess affordability. The bank has also shared that it will consider measures to prevent borrower overindebtedness during project selection, although details on these measures have also not been provided. Additionally, KDB has shared that it may offer financial literacy training or other types of training to loan recipients, although it is not a requirement for all eligible loans. While the bank has established an exclusion list of activities within its framework, the broad application of general purpose loans limits transparency on the end use of the loans and the extent to which the loans contribute to their social objective. Moreover, the bank has not set impact indicators to track specific outcomes of the projects. Lending to microfinance institutions (MFIs) is also eligible under this category and we lack visibility into how the MFIs will be selected and the quality and financing terms of their on-lending activities.

Additional contribution to sustainability considerations

We have not made an adjustment to the preliminary contribution to sustainability score based on additional considerations.

KDB has a robust due diligence process to identify and manage E&S risks associated with the financed projects. KDB's ESG committee, which the board of directors oversees, is responsible for the development and implementation of sustainable management practices throughout the organization. This includes the evaluation and management of E&S risks in projects and projects' compliance with the Equator Principles. Projects are evaluated for their E&S risks and impacts, and the adequacy of mitigation measures for the identified risks and impacts are assessed in the selection of projects. Loan agreements with the bank's borrowers must also include covenants relating to the compliance of E&S regulations and implementation of mitigation measures for potential E&S risks.

The framework is coherent with the sustainability priorities of KDB. As a policy bank in Korea, KDB aligns its business initiatives in line with Korea government policy and promotes sustainable financing at the operational level. As a policy bank supporting Korea's climate objectives, KDB has developed a green finance support system to support its strategic priorities to foster green industries and support transition. The bank has an overarching mission to lead the country's progress towards carbon neutrality, and has set 2030 targets to reduce GHG emissions by 15% (44 million tons) and reach a share of at least 28% of green financing, amounting to over KRW154 trillion ($111 billion) across 2024 to 2030. KDB also runs projects to promote socially responsible financing, with the aim of supplementing the country's social welfare system.

Appendix 1 - Alignment with principles scorecard for KDB's sustainable financing framework

Factor	Sub-factor	Component	Component score	Sub-factor score	Factor score
Use of proceeds	Clarity of the eligible categories	Nature of expenditure	A	Aligned	Aligned
		Definition of content, eligibility and exclusion criteria for nearly all categories	A		
		Location	A		
		BP: Definition of content, eligibility and exclusion criteria for all categories	No		
	Clarity of the objectives	Relevance of objectives to project categories for nearly all categories	A	Best practices	
		Coherence of project category objectives with standards for nearly all categories	A		
		BP: Objectives are defined, relevant and coherent for all categories	Yes		
	Clarity of expected benefits	Identification and relevance of expected benefits for nearly all categories	A	Aligned	
		Measurability of expected benefits for nearly all categories	A		
		BP: Relevant benefits are identified for all categories	Yes		
		BP: Benefits are measurable for all categories	Yes		
		BP: Disclosure of refinancing prior to issuance and in post-allocation reporting	No		
		BP: Commitment to communicate refinancing look-back period prior to issuance	Yes		
Process for project evaluation and selection	Transparency and clarity of the process for defining and monitoring eligible projects	Clarity of the process	A	Best practices	Best practices
		Disclosure of the process	A		
		Transparency of the environmental and social risk mitigation process	A		
		BP: Monitoring of continued project compliance	Yes		
Management of proceeds	Allocation and tracking of proceeds	Tracking of proceeds	A	Aligned	Aligned
		Periodic adjustment of proceeds to match allocations	A		
		Disclosure of the intended types of temporary placements of unallocated proceeds	A		
		BP: Disclosure of the proceeds management process	Yes		
		BP: Allocation period is 24 months or less	No		
Reporting	Reporting transparency	Reporting frequency	A	Best practices	Best practices
		Reporting duration	A		
		Report disclosure	A		
		Reporting exhaustivity	A		
		BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback	Yes		
		BP: Clarity and relevance of the indicators on the sustainability benefits	Yes		
		BP: Disclosure of reporting methodology and calculation assumptions	Yes		
		BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds	Yes		
		BP: Independent impact assessment on environmental and social benefits	Yes		
				Overall alignment with principles score:	**Aligned**

Legend: BP - Best practice, A - Aligned, PA - Partially aligned, NA - Not aligned

Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The 12 eligible categories included in KDB's framework are likely to contribute to 10 of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 3: Good Health and Well-being	*Access to Essential Services*	3.8: Achieve universal health coverage with access to quality and affordable essential health-care services and medicines for all
GOAL 4: Quality Education	*Access to Essential Services*	4.A: Build and upgrade education facilities that provide safe and effective learning environments for all
GOAL 5: Gender Equality	*Socioeconomic Advancement and Empowerment*	5.A: Establish women's equal rights to economic resources, access to ownership and control over property and financial services
GOAL 6: Clean Water and Sanitation	*Sustainable Water Management and Wastewater Management*	6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing hazardous chemicals and materials
		6.4: Increase water-use efficiency across all sectors and ensure sustainable supply of freshwater to reduce water scarcity
GOAL 7: Affordable and Clean Energy	*Renewable Energy*	7.2: Increase substantially the share of renewable energy in the global energy mix
	Energy Efficiency	7.3: Double the global rate of improvement in energy efficiency
GOAL 8: Decent Work and Economic Growth	*Employment Generation* *Social Enterprises*	8.3: Promote policies that support productivity, job creation, entrepreneurship, innovation, and encourage the growth of SMEs
GOAL 9: Industry, Innovation and Infrastructure	*Affordable Basic Infrastructure*	9.1: Develop sustainable infrastructure to support economic development and human well-being, focusing on equitable access
GOAL 11: Sustainable Cities and Communities	*Clean Transportation*	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
	Green Buildings	11.6: Reduce the adverse per capita environmental impact of cities, with special attention to air quality and waste management
GOAL 12: Responsible Consumption and Production	*Pollution Prevention and Control*	12.4: Achieve environmental management of chemicals and all wastes, and reduce their release to air, water and soil
		12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse
GOAL 13: Climate Action	*Climate Change Adaptation*	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the bank's sustainable financing framework, as well as resources and guidelines from public institutions, such as the ICMA's SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 3 - Summary of eligible categories in KDB's framework

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
	Eligible Green Categories		
Renewable Energy	» Development, construction, production, transmission of energy from renewable sources: - Solar , Geothermal (<100g CO_2/kWh), Hydro (<25MW) , Marine, Wind -Bio energy (<100g CO_2/kWh) converted from biological resources -Energy from waste materials (<100g CO_2/kWh) » Production of green hydrogen using electrolysis powered entirely with 100% renewable energy	Climate change mitigation	» Installed capacity in MW » Annual energy production in MWh » CO_2 emissions avoided equivalent avoided per year and/or per USD million Sustainable Financing Instruments
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% CO_2 reduction by 2030	Climate change mitigation Pollution prevention and control	» Length of new track built » Built passenger capacity » CO_2 emissions avoided equivalent avoided per year and/or per USD million Sustainable Financing Instruments
Energy Efficiency	» Energy storage systems, smart grids, appliances and products (such as LED smart module and lightings technology) in new and refurbished buildings in real estate and industrial sector having 30% minimal energy savings / improvement in energy efficiency	Climate change mitigation	» Amount / percentage of energy savings annually » CO_2 emissions avoided equivalent avoided per year and/or per USD million Sustainable Financing Instruments
Pollution Prevention and Control	Development 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.) » Facilities and technologies for waste recycling including recycling of end-of-life batteries	Pollution prevention and control	» Reduction in fine particulate PM10, PM2.5 or other air pollutants emissions (in tonnes) » Area of remediated land (sqm) / Amount of remediated soil (tonnes) » Amount of waste recycled (tonnes)
Sustainable Water Management and Wastewater Management	Development and/or construction of: » Sustainable Infrastructure for improving efficiency in providing clean and/or drinking water » Technology for recovering hydro-ecological environments (e.g. river restoration) » Facilities for preventing water pollution (e.g. wastewater treatments, infrastructure for water quality improvements), where net average energy consumption for abstraction and treatment is ≤ 0.5 kWh per cubic meter produced water supply and Infrastructure Leakage Index is ≤1.5 » Seawater desalination plant powered entirely with 100% renewable energy, with power consumption ≤2 kWh/m3	Sustainable Water Management and Wastewater Management	» Additional clean water supply (million m3) » Number of additional people and cities served » Amount of wastewater treated (million m3) » Decrease of pollution concentration

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
	Eligible Green Categories		
Green Buildings	» Construction or retrofit of green buildings which meet regional, national, or internationally recognized standards or certifications (e.g. LEED – Gold or above; BREEAM – Excellent or above; Korea G-SEED: Level II or above) » Construction or retrofit of energy-efficient data centers with power usage effectiveness (PUE) of 1.2 or below	Climate change mitigation	» Number of certified green buildings financed » Type and level of the green building certification » Annual power usage effectiveness (PUE) » CO2 emissions avoided equivalent avoided per year (kWh/m2 of GBA p.a.)
Climate Change Adaptation	Projects that contribute to reducing vulnerability to climate change impacts, including projects that: » Develop information support systems, such as climate observation and early warning systems » Increase resilience against impacts of climate change, such as sea level change, extreme weather events and natural disasters (e.g. flood mitigation barriers and wildfire mitigation and management)	Climate change adaptation	» Type and number of climate resilient infrastructures / projects financed » Number of people/areas with climate resilient infrastructure / projects » Number of climate related natural disasters avoided or reduced
	Eligible Social Categories		
Employment Generation	Loans to SME with ≤ 300 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) » Youth Startup Support Project	Employment Generation	» Number of job created and/or preserved » Number of small and medium corporations financed » Number and type of disadvantageous beneficiaries
Social Enterprises	» Social enterprises defined in the article 2.1 of "Social Enterprise Promotion Act" » Preliminary social enterprises certified by the head of local government or head of an administration department of central government	Socioeconomic advancement and empowerment Employment generation	

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
	Eligible Social Categories		
Affordable Basic Infrastructure	Water & Sanitation » Development of water and sanitation infrastructure to improve access to clean drinking water, sanitation, and sewers in areas where there is no access or access to water and sanitation infrastructure is substantially inadequate Transportation » Development of transportation infrastructure to improve connectivity in areas where road connectivity does not exist or is substantially inadequate Electricity » Development of transmission and distribution infrastructure to improve access to electricity in areas where there is no access or access to electricity is substantially inadequate Telecommunications » Development of telecommunications infrastructure in areas where telecommunications or internet access does not exist or is substantially inadequate	Affordable Basic Infrastructure	» Number of water, sanitation, transportation, electricity transmission or telecommunication infrastructure / facilities built » Number of people benefitting from the infrastructure / facilities
Access to Essential Services	Healthcare » Construction, development, or maintenance of public or free healthcare facilities (such as hospitals, clinics, health care centers, pharmacies, etc.) and eldercare facilities » Development of critical medical equipment or provision of diagnostic services (including magnetic resonance imaging (MRI) machines, respirators or services that support diagnostics such as laboratory testing) that is offered free or at subsidized cost to all » Research, development and production of affordably priced or subsidized medicines on the World Health Organization (WHO) essential medicines list to underserved populations or in underserved areas Education » Development of public or free education and childcare facilities and programs from kindergarten, elementary to tertiary » Construction of campuses and student housing for public or free schools and universities » Development of public or free vocational, technical training facilities and institutions	Access to Essential Services	» Number of hospitals and other healthcare infrastructure / facilities built » Number of patients benefitting from the infrastructure / facilities » Number of health-related R&D programs funded » Number of school and other education infrastructure / facilities built » Number of students benefitting from the infrastructure / facilities
Socioeconomic Advancement and Empowerment	» Loans to woman-owned enterprises as defined by IFC » Loans to microenterprises as defined by local government and financing to microfinance institutions	Socioeconomic Advancement and Empowerment	» Number of woman-owned enterprises financed » Number of microenterprises and microfinance institutions financed

Endnotes

1 Point-in-time assessment is applicable only on date of assignment or update.

2 IEA: Transport, accessed on 8 May 2025.

3 IEA: International Shipping, accessed on 8 May 2025.

4 IEA: Energy Efficiency, accessed on 8 May 2025.

5 The United Nations World Water Development Report 2024: water for prosperity and peace, March 2024.

6 Access to water in developing countries, accessed on 8 May 2025.

7 IEA: Buildings, accessed on 8 May 2025.

8 Status of Korean SMEs, Ministry of SMEs and Startups, accessed on 28 April 2025

9 OECD Economic Surveys: Korea, OECD, July 2024

10 Infrastructure, World Bank Group, 21 April 2025

11 OECD Better Life Index: Korea, OECD, accessed on 29 April 2025

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