

JCR Green Finance Evaluation

Last Updated: September 13, 2023

Preface

Green Bonds are debts whose use of proceeds is limited to the activities that positively contribute to the environment, such as taking measures for climate change, water resources and biodiversity. Specifically, those bonds are issued by companies, local governments or other organizations with the following features: (i) the use of proceeds is allocated exclusively to green projects, (ii) proceeds are tracked and managed in a reliable manner and (iii) transparency is ensured through reporting made after the issuance.¹

In Japan, Ministry of Environment (hereinafter referred to as "MOE") published Green Bond Guidelines (hereinafter referred to as "Guidelines"), aiming to further spread green bonds by securing the credibility of green bonds for environmental benefits and preventing greenwashing (not only green bonds but also other financial products labeled as sustainable finance even though they do not actually provide any benefits to the overall social environment) from being marketed.

In the Global Green Bond Principles² (hereinafter referred to as "GBP") formulated by ICMA and the Guidelines developed by MOE, it is recommended that issuers use the evaluation by other third parties since the objective review by third party institutions is recognized as materiality regarding the alignment with GBP from the perspective of the healthy development of green bonds.

In 2018, Loan Market Association (hereinafter referred to as "LMA") and Asia Pacific Loan Market Association (hereinafter referred to as "APLMA") announced Green Loan Principles (hereinafter referred to as "GLP") for loans with the purposes as same as those of GBP, and presentations were made in the ICMA annual meeting in the same year to promote disseminating green bonds or green loans. In March 2020, MOE published Green Loan and Sustainability Linked Loan Guidelines, reflecting the spread of green loans in the markets. MOE subsequently revised the Green Loan and Sustainability Linked Loan Guidelines in 2022, strongly recommending the external certification required by the latest Green Bond Principles be obtained, frameworks be prepared by issuers and the green project categories be subdivided in the Attachment.

JCR initially included borrowings in the evaluation of the Green Bond Evaluation Methodology. JCR however changed the name of the evaluation methodology to Green Finance Evaluation Methodology in June, 2019 while simultaneously JCR's Green Bond Evaluation was implemented in accordance with the GBP for green bonds, and JCR Green Loan Evaluation was carried out in conformity to the GLP for green loans (hereinafter, JCR

¹ Refer to "Green Bond Guidelines in 2022 version" by MOE.

² Green Bond Principles in 2018 version established by International Capital Market Association (hereinafter referred to as "ICMA")

Green Bond Evaluation and JCR Green Loan Evaluation are collectively referred to as JCR Green Finance Evaluation.)

Green bonds must not only bring environmental benefits but also contribute to enhancing the long-term corporate value of issuers and solving global issues. When ICMA's GBP was revised in 2018, the use of proceeds of green bonds was mapped to those to which green bonds are contributable in 17 Sustainable Development Goals ("SDGs"³) and 169 targets. JCR will take account of the degree of contributions to SDGs, based on the mapping announced by ICMA when evaluating green finance. JCR will provide JCR Green Finance Evaluation as a review by other third parties to green bonds and green loans, reflecting the concept of GBP, GLP and Guidelines. JCR has adopted high transparent evaluation systems, such as evaluation through scoring respective evaluation factors in JCR Green Finance Evaluation with which issuers or borrowers⁴ (hereinafter referred to as "issuers or others") can clearly grasp the improvements as green finance and investors also can precisely make better decisions hereon.

In September 2019, JCR became the first approved verifier of Climate Bonds Initiative (hereinafter referred to as "CBI") in Japan and has started to provide verification reports to obtain Climate Bond Certification with green bonds and green loans separately from JCR's original Green Finance Evaluation since then. In verification reports, JCR will verify the eligibility of Climate Bond in accordance with Climate Bond Standard, Taxonomy, Sector Criteria and Climate Resilience Principles stipulated by CBI.

In JCR Green Finance Evaluation, JCR will refer to the Taxonomy, Sector Criteria and Climate Resilience Principles of Climate Bonds Initiative as the approved verifier of CBI; however, JCR may present viewpoints differently from CBI since Japanese specific environmental issues, industrial structures or energy mix should be taken into consideration. JCR aims to contribute to disseminating the knowledge on green finance, growing/developing sound green finance markets and improving global environmental issues through providing both of the JCR Green Finance Evaluation and the verification of Climate Bonds Certification.

JCR Green Finance Evaluation Methodology is described as follows:

I Evaluation Target

JCR Green Finance Evaluation is applicable to various financing tools, such as bonds or loans whose use of proceeds are green projects exemplified in GBP, GLP and Guidelines. Industrial sectors or categories of the target issuers or others include:

- (1) Corporation, financial institutions, governments, local governments, international financial institutions, government-sponsored enterprises
- (2) Project finance

³ Sustainable Development Goals ("SDGs") are universal development goals adopted by UN Summit in 2015 to "leave no one behind" in both developed and developing countries

⁴ In evaluating green finance for SPCs' or Project Companies' financing, those issuers include sponsors or asset management companies who are integrally involved in actual business operations.

- (3) Investment corporations
- (4) Asset-backed securities

In cases where an investment corporation and all of its assets fall under GBP and green projects exemplified in Guidelines, investment equities may also be evaluated based on this evaluation method by applying mutatis mutandis to GBP. Focal points in such case are set forth in "V. JCR's Key Consideration in This Factor."

II Basic Structure of JCR Green Finance Evaluation

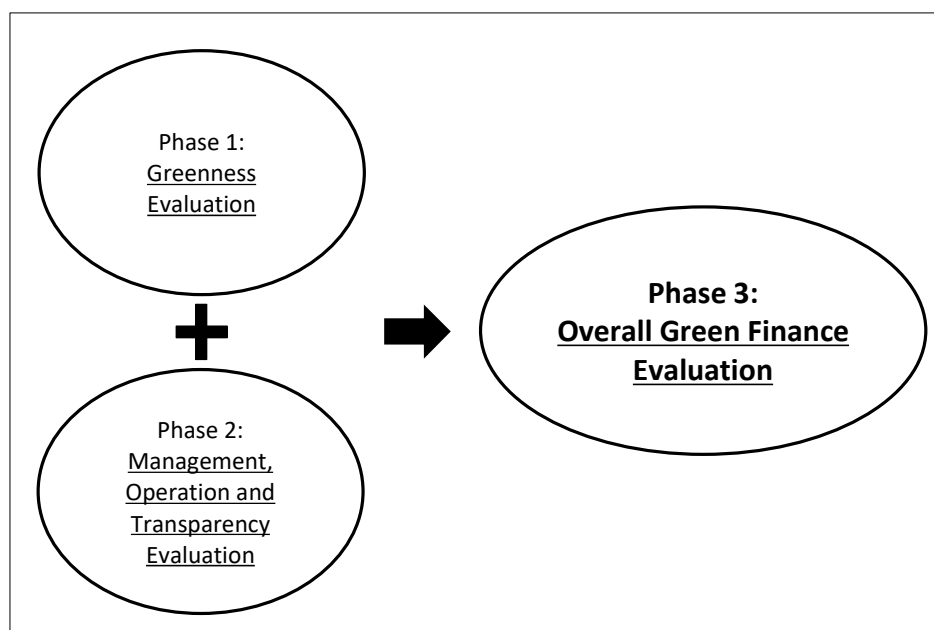
JCR divides JCR Green finance Evaluation into the followings three phases.

In "Evaluation Phase 1," JCR conducts the Greenness Evaluation of the target bonds. In particular, JCR firstly evaluates whether the target project is categorized into green projects. In cases where a project falls under green projects, JCR evaluates the project, focusing on the use of proceeds (a percentage allocated to green projects.)

In "Evaluation Phase 2," JCR carries out "Management, Operation and Transparency Evaluation." JCR evaluates whether (1) the management/operation systems and transparency of issuers or others are well developed; (ii) green projects will be certainly implemented or the use of proceeds will be definitely used as planned and (iii) the degree of disclosure in a series of processes (the certainty of realizing the aforementioned Greenness Evaluation) is realizable.

In "Evaluation Phase 3," JCR comprehensively evaluates the project, adding Management, Operation and Transparency Evaluation to Greenness Evaluation and determines JCR Green Finance Evaluation.

JCR Green Finance Evaluation Flow



III Evaluation Framework in Each Evaluation Phase

1. Evaluation Phase 1: Greenness Evaluation

In this evaluation phase, in cases where the target business is categorized into a green project, JCR will confirm the use of proceeds (a percentage allocated to the green project) and will evaluate the greenness of green finance on a scale of five from "g1" to "g5" as follows:

Percentage allocated to the proceeds of green projects	Greenness Evaluation
100% - 90% (Almost all the proceeds are allocated to green projects)	g1
89% - 70% (Most of the proceeds are allocated to green projects)	g2
69% to - 50% (More than half of the proceeds are allocated to green projects)	g3
49% - 30% (Low amount of the proceeds are allocated to green projects)	g4
29% - 10% (Very low amount of the proceeds are allocated to green projects)	g5
Less than 10%	N/A

2. Evaluation Phase 2: Management, Operation and Transparency Evaluation

In this evaluation phase, JCR will evaluate the management, operation and transparency of issuers or others, based on four evaluation factors regarding the management, operation and transparency provided by GBP, GLP and Guidelines (please refer to IV. Evaluation Methodology.) The evaluation will be made on a scale of five from "m1" to "m5" as follows:

Scores of Management, Operation and Transparency Evaluation	Evaluation
100-80 scores (the management and operational structure is well established and very transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are significantly promising.)	m1
79-60 scores (the management and operational structure is in place and highly transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are generally promising.)	m2
59-40 scores (there are some problems with the management and operation structure and transparency and some concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m3
39-20 scores (there are problems with the management and operation structure and transparency and concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m4
Less than 20 scores (there are serious problems with the management and operation structure and transparency and the implementation of projects and the allocation of proceeds in accordance with the plan cannot be expected.)	m5

3. Evaluation Phase 3: Overall Evaluation

In this evaluation phase, JCR will comprehensively evaluate the project (JCR Green Finance Evaluation) based on Greenness Evaluation from g1 to g5, taking Management, Operation and Transparency Evaluation from m1 to m5 into consideration.

Specifically, JCR will make JCR Green Finance Evaluation from Green 1 to Green 5 in accordance with the undermentioned JCR Green Finance Evaluation Matrix.

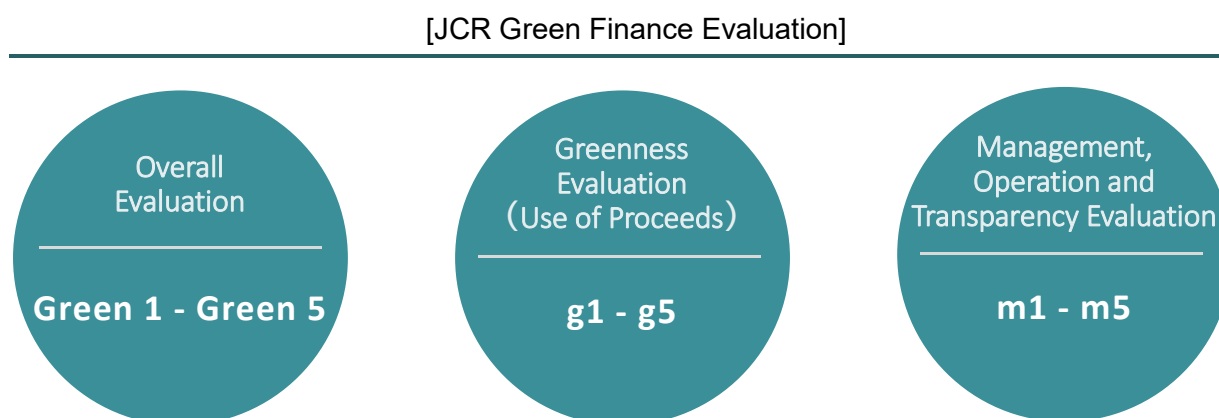
Green 1 is the highest green finance evaluation in JCR Green Finance Evaluation, which is assigned to green finance with the highest evaluation (g1+m1) in both Greenness Evaluation and Management, Operation and Transparency Evaluation.

[JCR Green Finance Evaluation Matrix]

		Management, Operation and Transparency Evaluation				
		m1	m2	m3	m4	m5
Greenness Evaluation	g1	Green 1	Green 2	Green 3	Green 4	Green 5
	g2	Green 2	Green 2	Green 3	Green 4	Green 5
	g3	Green 3	Green 3	Green 4	Green 5	N/A
	g4	Green 4	Green 4	Green 5	N/A	N/A
	g5	Green 5	Green 5	N/A	N/A	N/A

4. Presentation of JCR Green Finance Evaluation

JCR Green Finance Evaluation is mainly made on Overall Evaluation from Green 1 to Green 5, together with a combination of Greenness Evaluation from g1 to g5 and Management, Operation and Transparency Evaluation from m1 to m5.



IV Evaluation Methodology (Confirming, Evaluating and Scoring Evaluation Factors)

1. Phase 1: Greenness Evaluation Factors

JCR confirms the following factors to evaluate greenness.

(i) JCR reviews whether the target project is categorized into green projects.

Review whether the target project falls under green projects
(1) The proceeds financed with bonds or loans to be evaluated are allocated to green projects that satisfy the undermentioned requirements in addition to green projects illustrated in GBP, GLP and Guidelines.)
(2) The green project clearly has environmental benefits. It is obvious that the green project in question contribute to global objectives, such as SDGs, through the ICMA's mapping.
(3) Environmental benefits obviously exceed environmental disadvantages (it is preferable that both environmental benefits and disadvantage be evaluated quantitatively and comparable.) The projects have no significant harm impacts on other green projects, do not always use only technologies with fossil fuels, and aim to decarbonize or reduce carbon over time (Do No Significant Harm Assessment.)
(4) JCR takes six steps stipulated in CBI's Climate Resilience Principles ⁵ when evaluating climate change adaptation projects. JCR evaluates whether climate resilience is taking into consideration by referring to the check items in CBI's Sector Criteria ⁶ if any in climate change mitigation projects as well.

* In cases where the environmental disadvantages exceed the environmental benefits, such use of proceeds may be out of evaluation although other evaluation factors' scores mark high.

(ii) JCR confirms the use of proceeds (a percentage allocated to green projects) in cases where the target project is categorized as green projects.

2. Phase 2: Management, Operation and Transparency Evaluation Factors

(i) Four major factors to be considered in management, operation and transparency evaluation and their score distribution are as follows:

Major Evaluation Factors	Score Distribution
1. Appropriateness and Transparency concerning the Selection Criteria and Processes of the Use of Proceeds	25%
2. Appropriateness and Transparency of Management of Proceeds	25%
3. Reporting System	25%
4. Environmental Efforts as the Organization	25%

⁵ Refer to CBI Website: <https://www.climatebonds.net/climate-resilience-principles>

⁶ Refer to CBI Website: <https://www.climatebonds.net/standard/sector-criteria>

(ii) The factors of evaluation subdivision that compose of major evaluation factors are as follows:

Factors of Evaluation Subdivision

1. Appropriateness and Transparency concerning Selection Criteria and Processes of the Use of Proceeds

- (1) The greenness of each project is evaluated and confirmed by issuers or others.

- (2) In cases where Green Project has both environmental benefits and disadvantages, issuers or others take measures to avoid or mitigate such environmental disadvantages.

- (3) (a)The environmental objectives, which issuers or others strive to realize through the green finance to be evaluated (environmental benefits), (b) criteria to decide whether the green project that is subject to allocation of proceeds satisfies the environmental objectives and (c) the process to make the decision, are appropriate.

- (4) The outline of the objectives, criteria and processes in the aforementioned (3) are well explained to investors.

2. Appropriateness and Transparency of the Management of Proceeds

- (1) The plan to allocate the proceeds is appropriate (the ratio to new investment and refinancing is clarified. Look-back periods for refinancing projects are obviously defined.)

- (2) Systems are prepared to track and manage all the proceeds in a proper way (in case of evaluating borrowing facilities, and a tracking management system is in place to identify the tranches categorized into green investment and to ensure that the proceeds of the tranches are allocated to green projects.)

- (3) Internal control systems are in place to check the tracking management system in the aforementioned (2) by being audited internally or externally.

- (4) Documentary evidence to manage the proceeds is appropriately retained.

- (5) Plans are made to manage unallocated proceeds with safe and liquid assets. How to manage unallocated proceeds are explained to investors in advance.

3. Reporting System

- (1) The use of proceeds is explained to investors with prospectuses or other legal documents in advance.

 - (2) Plans are mapped out to disclose the latest information on the use of proceeds by green finance to the public after green bonds are issued or green loans are borrowed.

 - (3) Information should be disclosed at least once a year until all the proceeds are allocated. After that, any significant changes should be disclosed if any, as necessary.

 - (4) Disclosure includes the following factors:
 - Lists of green projects to which the proceeds are allocated
 - Overviews of each green project, including its progress
 - Amounts allocated to each green projects
 - Environmental benefits expected to be brought by each green project
 - Amounts or percentages, periods scheduled and management methods concerning unallocated net proceeds

 - (5) Appropriate key performance indicators are utilized, considering the nature of each green project when disclosing environmental benefits. It is preferable that such environmental benefits be quantitative and the calculation formula and assumptions be prepared for simultaneous disclosure.
-

Factors of Evaluation Subdivision

4. Environmental Efforts taken by the Organization

-
- (1) The management positions environmental issues as material and prioritized issues in their management strategies. Policies and plans on sustainability, including the environmental issues, are formulated, and key sustainability issues are recognized and identified.

 - (2) Internal departments/divisions with expertise in the environment issues, such as issuers or others or external institutions are involved in the process.

 - (3) Clear policy and the process are in place for the issuance of green bonds or the borrowing of green loans and also concrete criteria are in place to determine the green projects to which the proceeds are allocated.

 - (4) Issuers or others verify their green projects and environmental policy by seeking feedback from external environmental experts.

V JCR's Key Consideration in Each Evaluation Factor

1. Greenness Evaluation (First Phase)

It is essential for green finance that the proceeds be allocated to green projects with concrete environmental benefits. It is also important that the credibility of green bonds or green loans be ensured by excluding the so-called "greenwashing bonds" or "greenwashing loans," which appear as green bonds or green loans and which actually have no clear environmental benefits, or the proceeds are not appropriately allocated to green projects, from green bond markets or green loan markets in order to encourage to develop sound green bond markets and green loan markets. Considering the aforementioned matters, JCR shall thoroughly confirm the greenness of the use of proceeds by referring to the green projects exemplified in GBP, GLP and Guidelines (please refer to the Attachment 1 for details.) Green projects include other related and supporting expenditures, such as R&D and cover several business categories and cases with environmental objectives; however, not limited to these projects, JCR may find other cases as green projects by its own judgment.

Green finance can include not only new investment but also refinancing. In cases where refinancing is included, it is preferable that issuers or others unveil the respective ratios of new investment to refinancing and the investment or project portfolios subject to refinancing. It is also desirable that periods covered by green projects to be refinanced (lookback periods) be indicated.

In case of green loans, credit lines may be evaluated and in such a case, it is preferable that the tranches applicable to investment in green projects be confirmed and track and management be made.

JCR shall confirm whether the benefits concerned are consistent with international targets when evaluating environmental benefits. Efforts to link the achievement of SDGs with the investment required for which have been developed in international political frameworks for the last few years according to ICMA. JCR shall refer to the mapping⁷ of the green, social and sustainable bonds, with the SDGs targets announced by ICMA in June

⁷ <https://www.icmagroup.org/green-social-and-sustainability-bonds/mapping-to-the-sustainable-development-goals/>

2018 to unveil the environmental benefits of the target projects, which contribute to the SDGs' objectives or targets.

Although the use of proceeds is green, some projects may simultaneously entail environmental disadvantages. JCR therefore confirms whether the environmental disadvantages are well considered by its internal departments/divisions or external experts qualitatively and quantitatively in order to take necessary measures to avoid or mitigate such a disadvantages. As a result, in cases where the environmental disadvantages exceed the environmental benefits, JCR may not, in principle, provide green finance evaluation.

The use of proceeds must be clearly linked to green eligible projects determined by investment corporations in advance although the evaluation target is investment equities. Whenever the proceeds are financed through investment equities, these investment corporations must disclose that they will disclose specific assets to be acquired and that the assets in question are green-eligible in reference to the selection criteria stipulated by them in advance to investors. All eligible green assets held by those investment corporations are subject to evaluation since investment equities will be mixed with other investment equities after the procurement.

The types and environmental benefits of green projects may change day after day due to technological innovation. JCR will carry out greenness evaluation by referring to the green project types and calculation formula of environmental benefits that are effective at the time of evaluation.

2. Management, Operation and Transparency Evaluation (Second Phase)

(1) Appropriateness and Transparency concerning the Selection Criteria and Processes of the Use of Proceeds

JCR confirms whether the following factors are internally well considered and established, and the details are sufficiently explained to investors in advance when evaluating green finance.

- i. The objectives that will be realized through the green finance by issues or others (such as the prevention of climate change or energy saving)
- ii. The selection criteria of green projects (how to evaluate and select a project that is assumed to have concrete environmental benefits for the objectives)
- iii. The outlines of the process to determine the project ((a) is it appropriate as the allocation target of proceeds, considering its objectives and criteria assumed? And (b) how to decide whether the green project meets the environmental objectives by whom and which criteria are used?)

It is preferable that there be internal specific departments/divisions or feedback from external institutions be received when determining targets, criteria and processes.

In case of investment equities, the entire selection criteria and processes shall be evaluated when acquiring assets of the corporation in question since the selection criteria and entire processes of the use of proceeds include the means of financing all green eligible assets.

(2) Appropriateness and Transparency concerning Management of Proceeds

It is assumed that there are various ways to manage proceeds depending upon issuers or others; however, JCR confirms that the proceeds financed by the issuance of green bonds, the borrowings of green loans or

the issuance of investment equities are ensured to allocate to green projects and whether mechanisms and internal systems are in place to easily track and manage the allocation status. Some examples of tracking and managing proceeds are described in Guidelines; however, tracking and managing systems should be well explained to investors as well.

JCR gives importance to whether proceeds financed through green finance are scheduled to be used for green projects at an early stage and to the evaluation of management and operation methods for unallocated proceeds.

(3) Reporting System

Issuers or others should annually prepare and report the latest information concerning the use of proceeds until all the proceeds will be allocated, if necessary, according to GBP and GLP. Specifically, the outlines of green projects to which the proceeds are allocated, the amounts allocated and the environmental effects anticipated should be included (it is preferable that both quantitative and qualitative performance indicators be used.)

JCR evaluates whether reporting systems are planned in a detailed and effective manner before the issuance of green bonds and after the execution of green loans at the time of issuing green bonds or making green loans, based on GBP, GLP and Guidelines.

In case of investment equities, impact reporting should cover all the green eligible assets of the investment corporations as they will be intermingled as part of the capital stock. No time limit can be set for reporting due to the nature of investment equities. As long as the investment corporations exist, the reporting should include predetermined items as environmental benefits (impacts) around once a year, and the event concerned and the subsequent measures should be included in reporting in the event of a partial sale or loss of green eligible assets.

(4) Environmental Efforts taken by the Organization

It is important for the management to regard environmental issues as a matter of high priority for management, and green finance policies, processes and the selection criteria of green projects are clearly positioned by establishing departments/divisions specializing in environmental issues or in collaboration with external organizations in order for issuers or others to issue the green bonds to be targeted or make/manage green loans and disclose appropriate information to investors.

The department in charge of environmental issues is not necessarily specialized in environmental issues only; however, it is preferable that issuers or others ensure personnel who professionally consider the organization's efforts for green finance and environmental issues.

VI. Evaluating Climate Transition Finance

1. Definition and Significance of Climate Transition Finance

Transition Finance to decarbonized society in order to mitigate climate change (Climate Transition Finance) is a sustainable finance framework that supports the industries that are emitting a large amount of CO₂ and that

have not had much access to financing in the sustainable finance markets so far only when the industries are working to reduce CO2 emissions in accordance with long-term strategies.

Compared to the rest of the world, Japan's CO2 emissions are large, ranking the top 10 and have significant impacts on the global environment as a whole. On the other hand, decarbonization initiatives are progressively discussed in Japan, with Prime Minister Suga declaring virtually zero emissions by 2050 in his policy statement on October 26, 2020, and making the announcement of Green Growth Strategy toward carbon neutrality in December 2020. It is said that huge investment is required to achieve the goals in the Paris Agreement (aiming to limit global warming ideally to 1.5°C and, at the very least, to well below 2°C, compared with pre-industrial levels) and some estimates suggest that Asia as a whole will need to invest approximately 1,300 trillion yen over the next 10 years to combat global warming. Under these circumstances, it is difficult to cover all the investment demand needed to realize carbon-neutral society only with green finance for green projects that have already been established as clean technologies. It is an urgent task for companies to accelerate finance for the development, implementation and diffusion of low-carbon technologies on the path to decarbonization.

Capital markets play an important role in enabling climate transitions by encouraging efficient financing from investors for issuers or others who are seeking to address climate change risks. In response, ICMA established a working group on Climate Transition in February 2020, with over 80 financial institutions, investors and evaluation agencies as members, and ICMA's Climate Transition Finance Handbook was submitted on December 10, 2020. Prior to this in Japan, "Study Group on Financing for Environmental Innovation" (Chairperson: Kunio Ito, Project Professor, Graduate School of Business Administration, Hitotsubashi University), organized by the Ministry of Economy, Trade and Industry, published "Concept of Climate Transition Finance." In January 2021, "Transition Finance Environment Improvement Study Group" was scheduled to formulate domestic basic guidelines for financing through transition bonds or loans, based on the contents of the handbook as well.

In light of this domestic and international situation, JCR provides Climate Transition Finance Evaluation in accordance with Green Finance Evaluation Methodology for financing whose use of the proceeds is specified as necessary for the transition to decarbonized society.

2. Valuation Systems on Climate Transition Finance

Three evaluation phases are used for evaluation mechanisms, similar to those of Green Finance. When the use of proceeds includes those applicable to green projects and those relevant to transition projects, or when the use of proceeds is subject to only the project for climate transition (transition projects,) the evaluation is conducted as Climate Transition Finance.

2-1. Evaluation Phase 1: Climate Transition Evaluation

In Climate Transition Evaluation in Evaluation Phase 1, in cases where the target projects are categorized into green projects or transition projects, the use of proceeds (a percentage of proceeds allocated to green/transition

projects) will be confirmed and the eligibility of the use of proceeds for the transition finance will be evaluated on a scale of five from gt1 to gt5 according to the following concept.

Percentage of Proceeds Allocated to Green/Transition Projects	Evaluation
100-90% (almost all of the use of proceeds will be allocated to green/transition projects)	gt1
89-70% (majority of the use of proceeds will be allocated to green/transition projects)	gt2
69-50% (more than half of the use of proceeds will be allocated to green/transition projects)	gt3
49-30% (allocation ratio to green/transition projects is low)	gt4
29-10% (allocation ratio to green/transition projects is very low)	gt5
Less than 10%	N/A

2-2. Evaluation Phase 2: Management, Operation and Transparency Evaluation

In Evaluation Phase 2, the management, operation, and transparency of issuers or others will be evaluated on a scale of five from m1 to m5, based on the four evaluation factors on management/operation systems and transparency as indicated by GBP, GLP and Guideline, and the details are as follows. (Please refer to IV. Evaluation Methodology. In Evaluation Subdivisions, Green shall be replaced with Green/Transition.) The evaluation symbols shall be used for both Green Finance and Climate Transition Finance in Evaluation Phase 2.

Score of Management, Operation and Transparency Evaluation	Management, Operation, and Transparency Evaluation
100-80 scores (the management and operational structure is well established and very transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are significantly promising.)	m1
79-60 scores (the management and operational structure is in place and highly transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are generally promising.)	m2
59-40 scores (there are some problems with the management and operation structure and transparency and some concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m3
39-20 scores (there are problems with the management and operation structure and transparency and concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m4
Less than 20 scores (there are serious problems with the management and operation structure and transparency and the implementation of projects and the allocation of proceeds in accordance with the plan cannot be expected.)	m5

2-3. Evaluation Phase 3: Overall Evaluation

In Evaluation Phase 3, the overall evaluation (JCR Climate Transition Finance Evaluation) is determined based on Climate Transition Evaluation from gt1 to gt5 and taking the Management, Operation and Transparency Evaluation from m1 to m5 into consideration.

Specifically, JCR Climate Transition Finance Evaluation from Green 1 to Green 5 is determined in accordance with the undermentioned JCR Climate Transition Finance Evaluation Matrix.

Green 1 (T) is the highest level of the JCR Climate Transition Finance Evaluation. Green 1 (T) is given to the Climate Transition Finance that has obtained the highest evaluation (gt1+m1) in both Climate Transition Evaluation and Management, Operation and Transparency Evaluation.

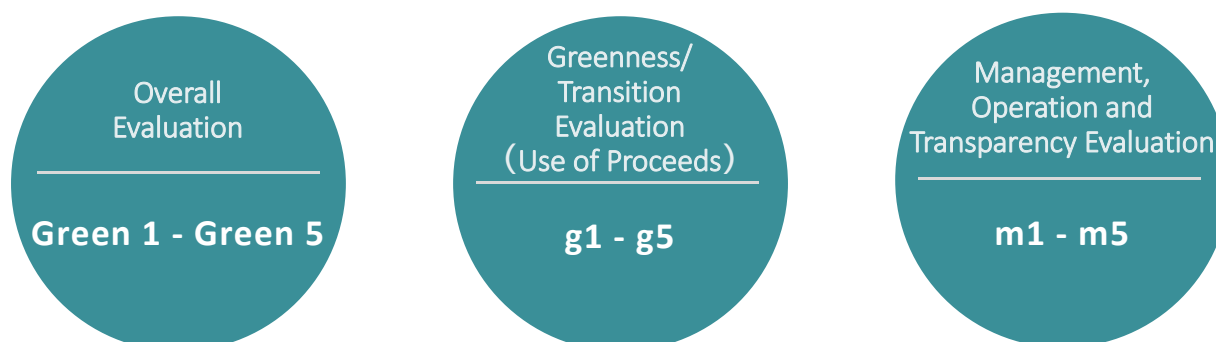
[JCR Climate Transition Finance Evaluation Matrix]

		Management, Operation and Transparency Evaluation				
		m1	m2	m3	m4	m5
Greenness/Transitional Evaluation	gt1	Green 1(T)	Green 2(T)	Green 3(T)	Green 4(T)	Green 5(T)
	gt2	Green 2(T)	Green 2(T)	Green 3(T)	Green 4(T)	Green 5(T)
	gt3	Green 3(T)	Green 3(T)	Green 4(T)	Green 5(T)	N/A
	gt4	Green 4(T)	Green 4(T)	Green 5(T)	N/A	N/A
	gt5	Green 5(T)	Green 5(T)	N/A	N/A	N/A

2-4. Presentation of JCR Climate Transition Evaluation

JCR' evaluation on Climate Transition Finance is indicated by focusing on JCR Climate Transition Finance Evaluation from Green 1(T) to Green 5(T), which is the overall evaluation, together with Green/Transitional Evaluation from gt1 to gt5 and Management, Operation and Transparency Evaluation from m1 to m5.

[JCR Climate Transition Finance Evaluation Results]



3. Differences from Green Finance Evaluation in Climate Transition Finance

The differences between Climate Transition Finance Evaluation and Green Finance Evaluation exist mainly in Evaluation Phase 1. Evaluation is made by basically replacing Green Project with Green/Transition Project in Evaluation Phase 2. The same screening factors are used in Evaluation Phase 1; however, the eligibility is determined by confirming the following points regarding Greenness/Transition (environmental benefits) of the use of proceeds.

Screening to Determine whether Project qualifies as Green/Transition Project

- (1) Proceeds financed by the bonds or borrowings to be evaluated are allocated to green/transition projects (projects that meet the following requirements, projects that are not included in the aforementioned but contribute significantly to CO₂ reduction and are one of the main measures to realize companies' transition strategies in addition to those exemplified in GBP, GLP and Guidelines.)
- (2) The green/transition projects concerned have clear environmental benefits and are obviously contributable to international goals, such as SDGs and the Paris Agreement.
- (3) The environmental benefits clearly exceed the environmental disadvantages (preferably quantified and comparable.)
 The projects will not cause significant harm to other green projects. (Do No Significant Harm Assessment)
 The projects are not anchored in fossil fuel-based technologies
 The projects aim to decarbonize or reduce carbon emissions in the long run.
 In cases where "fair transitions" are required for transition projects, it is preferable that the measures taken by issuers or others be fully included in the plans.
- (4) In case of evaluating climate transition projects, the following four factors as indicated in Climate Transition Finance Handbook⁸ should be confirmed.

Four factors to be confirmed in addition to the above in case of Climate Transition Finance

(1) Transition strategies and governance of issuers of others	<p>Will the use of proceeds be for projects or assets that contribute to strategies on transition for the issuers' or others' climate change mitigation?</p> <p>Is the use of the "Transition" label in financing intended to help issuers or others realize their corporate strategies to transition to business models that effectively address climate change-related risks and contribute to achieving the goals of the Paris Agreement?</p>
(2) Should be environmental key issues in the company's business models	<p>Given there are impacts on the current materiality identification, is the trajectory of issuers' or others' climate transition strategies relevant to environmental key issues in the issuers' or others' business models?</p>

⁸ Refer to ICMA's website at <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook>

(3) Should be based on scientific evidence.	<p>Are science-based targets and trajectories referenced to the climate change strategies of issuers or others? Does the migration roadmap meet the followings?</p> <ul style="list-style-type: none"> (i) Quantitatively measurable (ii) Consistent with generally recognized science-based goal settings (iii) Publicly disclosed (including milestones at midpoints) (iv) Certified and verified by independent third parties.
(4) Transparency should be ensured	<p>Has the company disclosed (or will it disclose) its investment plans for the use of proceeds to the extent possible, including capital expenditures and working capital? *R&D expenses can be included. Does the expenditure go beyond Business as Usual? Can clear explanations be provided as to how this expenditure will contribute to the implementation of Climate Transition Strategy?</p>

VII. Evaluating Blue Finance

1. Definition and Significance of Blue Finance

"The ocean makes up 70% of the Earth's surface and is the biosphere for 80% of the world's life. The ocean produces 50% of the oxygen needed by humans, absorbs 25% of the carbon dioxide and 90% of the additional heat from these emissions. The ocean is an important buffer against the impacts of climate change.

The ocean also has unimaginable biodiversity and provides us with many of the resources necessary for life, including food, jobs, minerals and energy. The ocean is however under unprecedented threats as a result of human activities. If we aim to solve critical challenges, such as climate change, food security crises, disease pandemics, biodiversity losses due to ocean pollution, economic disparity or conflicts, we must act now to protect our ocean." (Excerpt from Ocean Conference Draft Declaration)

Sustainable Blue Economy Finance Principles⁹ were formulated for the first time in the world as international guiding frameworks for banks, insurance companies and investors to finance sustainable ocean economies in 2018. The Principles consist of 14 ocean-specific criteria that are intended for the financial industry to encourage to finance to promote the implementation of the SDG Target 14 (Life below water) and the sustainability of ocean-based industries. The Principles were mapped out by the European Commission, WWF, World Resources Institute (hereinafter referred to as "WRI") and European Investment Bank (hereinafter referred to as "EIB") and subsequently transformed into Sustainable Blue Economy Finance Principles (hereinafter referred to as "SBEFP") by the United Nations Environment Programme Finance Initiative (hereinafter referred to as "UNEP FI"). In March 2022, UNEP FI, with financial assistance from the European Commission, published *Diving Deep: Finance, Ocean Pollution and Coastal Resilience*, which is a practical guide to sustainable finance.

⁹ Case studies of blue finance are introduced on the UNEP FI Website at <https://www.unepfi.org/blue-finance/resources/case-studies/>

The United Nations further agreed in the 2022 UN Ocean Conference in Lisbon in June 2022 to declare the implementation of scientific and innovative action plans on sustainable development among participating countries so as to support the implementation of the SDG 14, a draft of which was published.¹⁰

The United Nations Global Compact mapped out the Sustainable Ocean Principles, which set forth principles on actions that should be taken by business corporations to address ocean issues. International financial institutions are also increasingly defining Blue Economy or Blue Finance and developing finance frameworks. In January 2022, International Finance Corporation (hereinafter referred to as "IFC") established Blue Finance Guidelines, which specify the types of the use of proceeds that contribute to SDG Goals 6 and 14 respectively, with the aim of promoting blue finance in IFC's investments/loans and disseminating blue finance globally.

While principles and guidelines published by various international organizations are largely consistent with the idea of supporting financing projects, which promotes sustainable economic growth through the sustainable use of ocean resources and that contribute to the SDG Goal 14, the definition and concept of eligible projects that may address finance vary. IFC also includes projects that solve non-ocean-related water issues, such as water supply and sewage and that contribute to the SDG target 6.

In September, 2023, ICMA, IFC, UNEP FI, UNGC and ADB publicly disclosed "A Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy: SBE Guide.11" JCR is, in principle, to evaluate Blue Finance in accordance with SBE Guide in and after the date last updated although JCR defined Blue Finance by referring to the Guidance of IFC and UNEP FI and evaluated it prior to the date last modified. JCR evaluates freshwater-related projects although SBE Guide covers only marine-related projects since IFC includes freshwater-related projects. JCR is to confirm the alignment concerned with SBE Guide on marine-related projects and IFC Guidelines for Blue Finance on freshwater-related projects. JCR shall confirm the alignment with marine-related projects by referring to SBE Guide and freshwater-related projects by referencing to IFC Guidelines for Blue Finance. JCR will also evaluate UNEP FI SBEFP based on reference when confirming the environmental disadvantages or other related matters.

2. Evaluation Systems on Blue Finance

Three evaluation phases are used for evaluation mechanisms, similar to those of Green Finance. The original eligibility criteria shall be formulated for the eligibility of the use of proceeds by considering the Green Project Classification and SBE Guides stipulated by ICMA and IFC Guidelines.

¹⁰ The 2022 UN Ocean Conference (in Lisbon)
A/CONF.230/2022/12 2022 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

2-1. Evaluation Phase 1: Blueness Evaluation

In cases where target projects are categorized into blue projects in evaluating blueness in Evaluation Phase 1, the use of proceeds will be confirmed and the eligibility hereof for Blue Finance will be evaluated on a scale of five from b1 to b5 according to the following concepts.

Percentage of Proceeds Allocated to Blueness Project	Blueness Evaluation
100-90% (almost all of the use of the proceeds will be allocated to blue projects)	b1
89-70% (majority of the use of the proceeds will be allocated to blue projects)	b2
69-50% (more than half of the use of the proceeds will be allocated to blue projects)	b3
49-30% (allocation ratio to blue projects is low)	b4
29-10% (allocation ratio to blue projects is very low)	b5
Less than 10%	N/A

2-2. Evaluation Phase 2: Management, Operation and Transparency Evaluation

In Evaluation Phase 2, the management, operation, and transparency of issuers or others will be evaluated on a scale of five from m1 to m5 below, based on the four evaluation factors on management/ operation systems and transparency as indicated by GBP, GLP and Guidelines. (Refer to IV. Evaluation Methodology. In Evaluation Subdivisions, Green shall be replaced with Blue.) The same symbols will be used for both Green Finance and Blue Finance in Evaluation Phase 2.

Score of Management, Operation and Transparency Evaluation	Management, Operation and Transparency Evaluation
100-80 scores (the management and operational structure is well established and very transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are significantly promising.)	m1
79-60 scores (the management and operational structure is in place and highly transparent. The implementation of projects and the allocation of proceeds in accordance with the plan are generally promising.)	m2
59-40 scores (there are some problems with the management and operation structure and transparency and some concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m3
39-20 scores (there are problems with the management and operation structure and transparency and concerns about the implementation of projects and the allocation of proceeds in accordance with the plan.)	m4
Less than 20 scores (there are serious problems with the management and operation structure and transparency and the implementation of projects and the allocation of proceeds in accordance with the plan cannot be expected.)	m5

2-3. Evaluation Phase 3: Overall Evaluation

In Evaluation Phase 3, the overall evaluation (hereinafter referred to as "JCR Blue Finance Evaluation") will be determined based on Blueness Evaluation from b1 to b5 by taking Management, Operation and Transparency Evaluation from m1 to m5 into consideration.

Specifically, JCR Blue Finance Evaluation from Blue 1 to Blue 5 shall be determined in accordance with the "JCR Blue Finance Evaluation Matrix" below.

Blue 1 is the highest level of the JCR Blue Finance Evaluation. Blue 1 is given to the Blue Finance that has obtained the highest evaluation (b1+m1) in both Blueness Evaluation and Management, Operation and Transparency Evaluation.

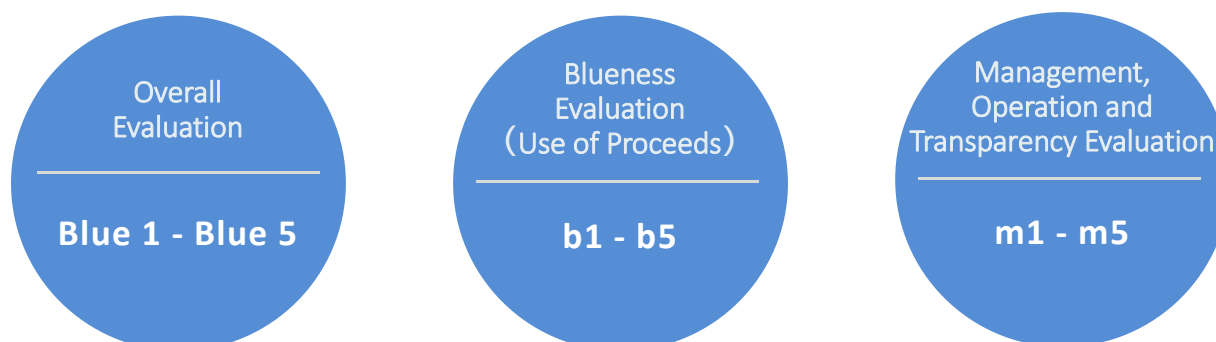
[JCR Blue Finance Evaluation Matrix]

		Management, Operation and Transparency Evaluation				
		m1	m2	m3	m4	m5
Blueness Evaluation	b1	Blue 1	Blue 2	Blue 3	Blue 4	Blue 5
	b2	Blue 2	Blue 2	Blue 3	Blue 4	Blue 5
	b3	Blue 3	Blue 3	Blue 4	Blue 5	N/A
	b4	Blue 4	Blue 4	Blue 5	N/A	N/A
	b5	Blue 5	Blue 5	N/A	N/A	N/A

2-4. Presentation of JCR Blue Finance Evaluation

JCR's evaluation on Blue Finance is indicated by focusing on JCR Blue Finance Evaluation from Blue 1 to Blue 5, which is overall evaluation, together with Blueness Evaluation from b1 to b5 and Management, Operation and Transparency Evaluation from m1 to m5.

[JCR Blue Finance Evaluation Results]



3. Differences from Green Finance Evaluation in Blue Finance

The differences between Blue Finance Evaluation and Green Finance Evaluation mainly exist in Evaluation Phase 1. In Evaluation Phase 1, the same screening factors will be used; however, the alignment will be determined by confirming the following factors on Blueness (environmental benefits) of the use of proceeds.

Screening Factors whether Project is Categorized into Blue Projects
(1) Do the proceeds financed by the bonds or borrowings to be evaluated fall under blue finance areas as described in SBE Guide for marine-related projects and IFC Guidelines for freshwater-related projects?
(2) Does the blue project has clear environmental benefits related to the sustainable marine economy or water infrastructures? Does the blue project has clear contributions to the achievement of at least one of the targets related to SDG Target 6 or 14?
(3) Does the project fall under one of the project classifications indicated in GBP or GLP?
(4) Will not the implementation of projects pose serious risks to the achievement of other SDG targets (especially 2, 7, 12 and 13?)
(5) Do the environmental benefits clearly exceed the environmental disadvantages (preferably quantified and comparable?) Has it been confirmed that the project will not cause significant harm to other green/blue projects? Does the target project operates in accordance with IFC Performance Standard, World Bank EHS Guidelines or ESG standards equivalent to the aforementioned? Is the project not an exempted project (offshore oil and gas mining operations, deep sea mining operations and other sectors considered to have unsustainable practices in place) as defined by SBE Guide and UNEP FISBEFI (Minimum Safeguard?) Are the environmental disadvantages appropriately managed/alleviated in the context of UNEP FISEFI?
(6) Do financial institutions comply with UNEP FI's Sustainable Blue Finance Principles in case of loans?

VIII Evaluating Green Finance Framework

JCR may conduct the Green Finance Framework Evaluation for the green bond's issuance or the green loan's borrowing policy of issuers or others, instead of individual green bond's issuance or separate green loan's borrowing policy to confirm the alignment with GBP, GLP or Guidelines at the request of issuers or others. In such a case, this evaluation method shall apply mutatis mutandis; however, the evaluation mark shall be indicated with (F) at the end of the evaluation mark. The same applies to Climate Transition Finance Evaluation and Blue Finance Evaluation.

Green Finance Framework Evaluation involves evaluation on the green finance policy of issuers or others and does not include Greenness Evaluation and Management, Operation, and Transparency Evaluation of the individual uses of proceeds implemented based on the policy concerned. Accordingly, it is necessary to separately evaluate individual bonds/loans for green finance. As the framework evaluation is to confirm the

consistency with GBP and Guidelines at the time of evaluation, it is essential to request JCR to review the framework evaluation and update the evaluation when any changes in the framework or major revisions in GBP are made. If the framework is modified without any updated evaluation by JCR, or if frameworks do not comply with GBP due to its revisions, JCR's evaluation prior to such event will be invalid.

IX Assumption and Limit of this Evaluation

JCR's green finance evaluation is to confirm that the environmental benefits are appropriately calculated at the time of planning to issue green bonds or borrow green loans or issuing green bonds or borrowing green loans quantitatively or qualitatively by issuers or others or the third parties who made the request. This evaluation does not guarantee that such benefits will continue in the future.

The impacts on the environmental benefits and disadvantages of green projects are calculated by internal organizations/personnel with special knowledge or by external institutions, based on the details disclosed by issuers or others. JCR evaluates the impacts based on the aforementioned results and it will not calculate the impacts by itself.

X Periodical Review

JCR may review periodically in cases where it finds the necessity to follow up the unallocated proceeds or to confirm whether impact reporting on planned environmental benefits is carried out.

In the event that evaluation is made against green finance frameworks, such as green finance, including investment equities, a periodic review, in principle, shall be conducted on the implementation of financing based on such framework and the status of allocation and green-eligible assets.

■Disclaimers

The information contained in this document may be mistaken due to human, mechanical or other reasons. JCR therefore makes no representation or warranty, express or implied, as to the accuracy, result, appropriateness, timeliness, completeness, marketability, or fitness for any particular purposes of such information, and JCR assumes no responsibility for any errors, omissions or consequences of using such information. JCR shall not be liable for any losses of opportunities and extraordinary, indirect, incidental or consequential damages of any kind, including any losses of money, which may result from any use of such information under any circumstances, whether contractual liability, tort liability, negligence or other causes of liability, and whether such damages are foreseeable or unforeseeable. The information concerned is a comprehensive statement of opinion of JCR at the present time and is not a statement of a fact and does not make any recommendations regarding credit risk decisions or the decision to purchase, sell or hold individual bonds, commercial paper or the like. All rights to this document are held by JCR and it is prohibited to duplicate, translate, or alter, whether in whole or in part, without permission from JCR, including data of JCR Green Finance Evaluation.

Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

Green Projects in Green Bond Principles by ICMAⁱ, Green Loan Principles by LMA, Green Bond Guidelines and Green loan Guidelines by Ministry of Environment

*The followings are just examples and not limited hereto. It is necessary to consider the applicability to green projects in the future while paying close attention to trends in international treatment.

ICMA GBP/LMA GLP	MOE Guidelines (in 2022)
Renewable energy (including power generation, transmission, appliances or products)	<ol style="list-style-type: none"> 1. Renewable energy projects (including power generation, transmission and appliances) <ol style="list-style-type: none"> 1-1 Power generation projects with renewable energy, such as solar power, wind power, water power, biomass (limited to those whose sustainability is confirmed or those deprived from waste,) or geothermal power 1-2 Projects to install electric power-cables to transmit or batteries to store energy generated by renewable energy and to maintain/manage, coordinate demand/supply or store energy 1-3 Projects to manufacture equipment used by the aforementioned projects, such as solar panels, electric power-cables and batteries to store energy 1-4 Projects that use renewable energy power, such as solar or geothermal power 1-5 Projects that use renewable energy for part or all of the electricity used in offices, factories, residences or data centers 1-6 Projects that provide ICT solutions contribute to renewable energy (maintenance/management systems, operation systems and optimal supply/demand adjustments)
Energy efficiency (such as newly built/refurbished buildings, energy storage, district heating, smart grids, appliances or products)	<ol style="list-style-type: none"> 2. Projects for energy efficiency (including newly built/refurbished buildings, energy storage, district heating, smart grids, appliances or products) <ol style="list-style-type: none"> 2-1 Projects for the construction/renovation of Net Zero Energy House ("ZEH"), Net Zero Energy Building ("ZEB") and other energy efficient buildings 2-2 Projects for construction/renovation of highly efficient buildings (including thermal insulation,) such as offices, factories or residences to obtain LEED, CASBEE and BELS in the environment authentication systems 2-3 Projects to install appliances or facilities, which are highly energy efficient to office, factories, houses or data centers 2-4 Projects that install equipment on the effective use of energy, such as energy storage, district heating/cooling or smart grids 2-5 Projects for the provision of ICT solutions that contribute to energy conservation (BEMS, HEMS, CEMS, ITS or supply chain management,) and the introduction of communication technologies with highly energy efficiency

ICMA GBP/LMA GLP	MOE Guidelines (in 2022)
<p>Pollution prevention and management (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission efficient waste to energy)</p>	<p>3. Projects for pollution prevention and management (including wastewater treatment, greenhouse gas emission control, soil purification, waste management of three R's (Reduce, Reuse and Recycle), thermal recycling and these related environmental monitoring)</p> <p>3-1 Projects that contribute to realizing circular economy (including designing/manufacturing energy efficient/long-life products, using materials with low environmental effects, such as recycling materials or recyclable materials, inverse manufacturing (designing/manufacturing products, considering the flow of collection, degradation, selection and reuse) and advanced waste collection/treatment (including waste disposal facilities that promote recycling and collect energy)</p> <p>3-2 Projects to control the emissions of hazardous chemicals through introducing advanced facilities/technologies on preventing the leakage, volatilization and penetration of hazardous chemicals or using alternatives</p> <p>3-3 Projects to design or manufacture products that contribute to controlling the emissions of chlorofluorocarbons</p> <p>3-4 Projects to install facilities that contribute to the advanced treatment and reuse of waste water from factories</p> <p>3-5 Projects to treat contaminated soil</p> <p>3-6 Projects that contribute to preventing pollution caused by marine plastic waste</p> <p>3-7 Projects that provides ICT solutions that contribute to the prevention and management of water pollutants, air pollutants and hazardous chemicals and the control of waste disposal</p>
<p>Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; environmental smart farm, such as biological grain management or drip irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation or the preservation or restoration of natural landscapes)</p>	<p>4. Projects for the sustainable management of natural resources and land use (including sustainable agriculture, fisheries, aquaculture and forestry; Integrated Pest Management ("IPM"), or drip irrigation)</p> <p>4-1 Projects to obtain certification on sustainability, such as MSC or ASC concerning fisheries and aquaculture</p> <p>4-2 Projects for the preservation/restoration of water resources</p> <p>4-3 Projects to obtain certification on sustainability, including Forest Stewardship Council ("FSC") regarding forestry</p> <p>4-4 Projects for sustainable afforestation and the preservation/restoration of natural landscape</p> <p>4-5 Projects that provide ICT solutions that contribute to the sustainable management of natural resources and land use (including traceability systems on the sustainability of agricultural, forestry and fishery resources)</p> <p>4-7 Projects, such as the preservation and creation of urban green spaces or the formation of green networks in cooperation with local governments</p> <p>4-8 Projects that contribute to reducing the burdens on natural resources</p>

ICMA GBP/LMA GLP	MOE Guidelines (in 2022)
<p>Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine or watershed environments)</p>	<p>5. Projects for terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine or watershed environments)</p> <p>5-1 Projects to conserve wetland and coral reef.</p> <p>5-2 Projects to control wildlife damages or invasive species to prevent ecological damages caused by wildlife, including deer or invasive species</p> <p>5-3 Projects to regenerate the bank protection of rivers in a way close to nature</p> <p>5-4 Projects that provide ICT solutions that contribute to biodiversity (such as ecosystem monitoring, forest management systems, wildlife damage prevention systems or biodiversity data analysis using satellites, aircraft or IoT)</p> <p>5-5 Projects related to protected areas or Other Effective area-based Conservation Measures ("OECM") on land or in the ocean</p> <p>5-6 Projects for landscape conservation or restoration</p>
<p>Clean transportation (such as electric, hybrid, public, rail, non-motorized, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)</p>	<p>6. Projects for clean transportation (including transportation using engines, railways, bicycles, multi-modal, the means of transport with clean energy or infrastructure development to reduce harmful emissions)</p> <p>6-1 Projects to develop and manufacture electric vehicles (such as electric cars, fuel cell vehicles, plug-in hybrid or hybrid vehicles) or railways or infrastructure improvements to use the aforementioned manufactured goods</p> <p>6-2 Projects to improve the efficiency of distribution systems through the development of planned distribution bases, intensive transportation networks, modal shifts or co-sharing of transportation</p> <p>6-3 Projects to introduce equipment to support environmentally conscious driving (digital type operation recorders)</p> <p>6-4 Projects to develop facilities for park and ride and car sharing</p>
<p>Sustainable water resources and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training or other forms of flooding mitigation)</p>	<p>7. Projects for sustainable water resources management (including sustainable infrastructure for clean or drinking water, wastewater treatment, sustainable urban drainage systems, river training or other forms of flooding mitigation)</p> <p>7-1 Projects to preserve hydrologic cycles, such as water source cultivation or the soil infiltration of rain water (including the development of green infrastructures)</p> <p>7-2 Projects to develop facilities to protect flood damages</p> <p>7-3 Projects to desalinate seawater</p>
<p>Climate change adaptation (including information support systems, such as climate observation or early warning systems)</p>	<p>8 Projects for climate change adaptation</p> <p>8-1 Agriculture, forestry, and fisheries: Projects for the development and introduction of crop varieties resistant to climate change or the introduction of agriculture to reduce environmental loading</p> <p>8-2 Water environment/water resources: Projects for the efficient use of water resources of the introduction of measures for drought</p> <p>8-3 Natural ecosystem: Projects for the development of green infrastructures, such as ecosystem-based adaptation or Ecosystem-based Disaster Risk Reduction ("ECODRR")</p> <p>8-4 Natural disasters/coastal areas: Projects to improve disaster prevention/mitigation functions in logistics, railways, ports, airports, roads, water</p>

ICMA GBP/LMA GLP	MOE Guidelines (in 2022)
	<p>infrastructures, waste treatment facilities, traffic safety facilities or private real estate</p> <p>8-5 Health: Projects to provide weather information and Wet Bulb Globe Temperature ("WGBT") or raise awareness for the aforementioned, spread/enlighten preventive/dealing measures, provide information on occurrence status, install air conditioners and dehumidifiers or create cool spots (sunshades or mists)</p> <p>8-6 Industrial/economic activities: Projects to ensure the sustainability of projects, such as measures for weather disasters in business offices, relocation from areas with high climate risks, measures for heat or efforts to secure stable supplies of raw materials</p> <p>8-7 National life/urban life: Projects for the development of systems under which prompt and appropriate emergency measures and restoration can be taken in case of reduced/lacks of water along with the development of sewage facilities to prevent the floods of internal waters or the damage of facilities.</p> <p>8-8 Projects for weather observation or monitoring and early warning systems or projects that provide ICT solutions that contribute to climate change adaptation</p>
<p>Eco-efficient, circular economy adapted products or production technologies and processes (such as the development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging or distribution)</p>	<p>9. Projects for circular economy adapted products, production technologies/processes and projects for eco-efficient products (such as the development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging and distribution or tools or services on circular economy)</p> <p>9-1 Projects to manufacture the products which could obtain environmental certification or environmentally friendlier products (including the development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging and distribution, tools or services on circular economy or the construction/improvements of factories/workplaces for manufacturing the products concerned)</p> <p>9-2 Projects to implement R&D or the introduction of technologies and products to reduce greenhouse gas emissions (technologies or products related to projects described in the relevant items, technologies on separation, recovery, storage and the utilization of hydrogen, ammonia and CO², next-generation aircrafts or ships. These are just examples and not limited hereto.)</p>
<p>Green buildings that meet regionally, nationally or internationally recognized standards or certification</p>	<p>10. Projects for Green Buildings</p> <p>10-1 Projects to newly build or renovate Green Buildings that are not only energy efficient but also address a wide range of considerations, such as water consumption or waste management in compliance with domestic standards or environmental certification systems under which a high level of efficiency is demonstrated, such as CASBEE /LEED certification</p>

ICMA/IFC/UNEP FI/UNGC/ADB Bonds to Finance the Sustainable Blue Economy – A Practitioner's Guide – Blue Project Classification to be Indicator

GBP Environmental Goals					
Category and Sub-category of Blue Project to be Indicator (with closely related to GBP Category)	Climate Change Mitigation	Climate Change Adaptation	Natural Resource Conservation	Biodiversity Conservation	Pollution Prevention and Control
<p>1. Marine Climate Change Adaptation and Resilience ("Climate Change Adaptation") Projects that support social-ecological resilience and adaptation against climate change, including the utilization of nature-based solutions <i><Only projects within 50 km from coasts or within the marine environment></i></p>		◆◆◆	◆◆	◆	
<p>2. Management, Conservation and Recovery of Marine Ecosystem ("Terrestrial and Aquatic Biodiversity") <i><Only projects within the marine environment or within 100 km from coasts></i></p>	◆	◆	◆◆◆	◆◆◆	◆◆
<p>3. Sustainable Coastal and Marine Tourism Projects that improve the environmental sustainability in coastal and marine tourism</p>			◆◆	◆◆	◆◆
<p>4. Sustainable Marine Value Chain ("Environmentally sustainable management by utilizing living natural resources and land") Projects that improve the environmental sustainability of marine value chains</p> <p>a. Sustainable marine fishing management b. Sustainable aquaculture projects (algae, bivalve, fish and sea weed) c. Sustainability of fishery product supply chains</p>	◆	◆	◆◆	◆◆	◆◆◆
<p>5. Ocean Renewable Energy ("Renewable Energy") Projects that increase the ratio of marine renewable energy in the total electricity generated and Renewable Energy Projects that protect the marine environment while supporting other SBE sectors e.g.,</p>	◆◆◆		◆	◆◆	

GBP Environmental Goals					
Category and Sub-category of Blue Project to be Indicator (with closely related to GBP Category)	Climate Change Mitigation	Climate Change Adaptation	Natural Resource Conservation	Biodiversity Conservation	Pollution Prevention and Control
a. Offshore wind (Bottom-fixed and floating) b. Wave c. Tidal d. Floating sunlight e. Ocean thermal energy conversion					
6. Marine Pollution ("Pollution prevention and control"/"sustainable water supply management"/"circular economy adapted products, production technologies and processes") Projects that prevent, control and reduce discharge of wastes into coasts and the marine environment a. Water-drainage management b. Solid waste management c. Resource efficiency and circular economy (Prevent and reduce waste) d. Non-point pollution management <i><Limited only within 100 km from coasts for Water-drainage Project. Limited only within 50 km from coasts or rivers that flow into the sea for Solid Waste Project Limited only within 200 km from coasts or within 50 km from rivers (or their tributaries) that flow into the sea for Non-point Pollution Project></i>	◆◆	◆◆	◆◆	◆◆	◆◆◆
7. Sustainable Ports ("Clean transport") Projects that increase environmental performance, functions in ports and sustainability of infrastructure	◆◆	◆			◆◆◆
8. Sustainable Marine Transport ("Clean transport") Projects that improve the environmental performance and the sustainability of marine transport	◆◆		◆	◆◆◆	◆◆◆
9. Water Supply (facilities to supply clean water efficiently, research & study and design)* 1) Newly construct water supply treatment/storage facilities and sustainable supply infrastructures (improve 20	◆◆◆	◆	◆	◆	◆◆

GBP Environmental Goals					
Category and Sub-category of Blue Project to be Indicator (with closely related to GBP Category)	Climate Change Mitigation	Climate Change Adaptation	Natural Resource Conservation	Biodiversity Conservation	Pollution Prevention and Control
per cent or more of NRW (Non-Revenue Water) (%) 2) Renovate the existing water infrastructures (improve 20 per cent or more of NRW (Non-Revenue Water) (%)) 3) More sustainable desalination plants that protect the depletion of ground water and wetlands and are helpful for avoiding hypersaline pollution in the environment) 4) Technologies or facilities that increase water efficiency, and water management activities that reduce water usage, including the significant reduction of water consumption in land-based aquaculture, agriculture and irrigation, and residential/commercial and industrial uses or loans or refinancing to technologies (e.g., drip irrigation or water recycling solutions.) that demonstrate significant advantageous water efficiency in documents					

GBP = Green Bond Principles: km = kilometers

Note: Symbols indicate the contribution of each category to achieving GBP environmental targets

- ◆◆◆ (i) = Level 1
- ◆◆ (ii) = Level 2
- ◆ (iii) = Level 3
- (iv)

*Refer to the eligibility criteria of IFC Guidelines for Blue Finance for water supply related projects.

Source: ICMA/IFC/UNEP FI/UN Global Compact/ADB Bonds to Finance the Sustainable Blue Economy – A Practitioner’s Guide – IFC Guidelines for Blue Finance