

JCR Sustainability Finance Evaluation

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Preface

Sustainability finance is a bond or a loan, etc. with all of their proceeds being used for new investments or refinance for both green projects and social projects. Sustainability bonds are bonds which are conform to 4 key components that are common to both Green Bond Principles ("GBP") and Social Bond Principles ("SBP"). Out of the use of proceeds, it is necessary to check eligibility for GBP for the green projects and that for SBP for social projects. An issuer should decide by taking into account its most important objective whether its finance is placed as green finance, social finance, or sustainability finance.

JCR implements JCR Sustainability Finance Evaluation in accordance with the Sustainability Bond Guideline ("SBG") defined by ICMA. Therefore, even if a project is evaluated as Sustainable by other concepts, in cases where conformity to GBP and SBP cannot be confirmed, the project may not be evaluated by this evaluation method and may be subject to different evaluation systems or third party opinions, etc.

JCR describes JCR Sustainability Finance Evaluation as below.

I Subject of evaluation

JCR Sustainability Finance Evaluation is applicable to various financing tools such as bonds, loans, etc. with the use of proceeds being green projects illustrated by GBP and social projects illustrated by SBP. The following are industries and business areas of issuers, etc.

- (1) Nonfinancial corporations, Financial institutions, Governments, Local public bodies, International financial institutions, Government agencies
- (2) Project finance
- (3) Investment corporations
- (4) Asset securitization products

II Basic framework of JCR Sustainability Finance Evaluation

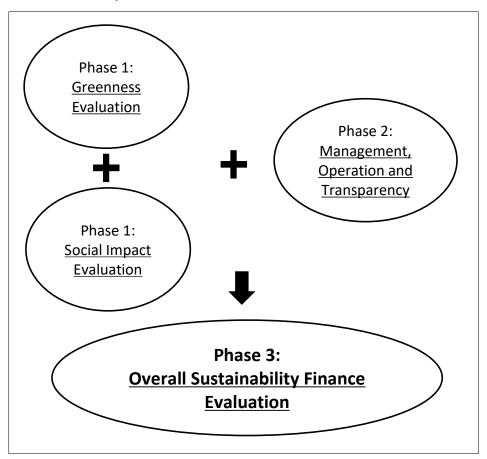
JCR implements the following 3 steps to evaluate sustainability finance.

In Evaluation Phase 1, JCR evaluates "greenness and social beneficial impacts" of the bonds, etc. First, JCR assesses whether the projects are applicable to the green projects or social projects. If it is judged as a green project or a social project, JCR assesses it focusing on the use of the proceeds (proportion of the proceeds applied to the green projects).



In Evaluation Phase 2, JCR evaluates "Management, Operation and Transparency." JCR evaluates the issuers' management and operation systems and transparency. JCR believes if the management and operation system is well developed, it will improve the certainty of implementing the planned use of proceeds and the green projects or social projects. In addition, JCR evaluates the degree of disclosures related to the use of proceeds, management of proceeds, selection policy, criteria and processes. (JCR call this as "certainty of realizing the greenness and social beneficial impacts evaluation").

In "Evaluation Phase 3," JCR determines the total evaluation results by comprehensively considering "Greenness and Social Beneficial Impacts Evaluation" results and "Management, Operation and Transparency Evaluation" results.



JCR Sustainability Finance Evaluation flow:



III Evaluation framework by each evaluation phase

1. Evaluation Phase 1: Greenness and Social Beneficial Impacts Evaluation

In this evaluation phase, JCR assesses how much the use of proceeds is allocated to green projects or social projects, if the projects are considered as green projects or social projects. Evaluation results shall be classified into 5 grades from "gs1" to "gs5" as follows.

Greenness and Social Beneficial Impacts Evaluation (how much the use of proceeds is allocated to green projects or social projects)	Evaluation grade
100% to 90% (Almost all the proceeds are allocated to green projects or social projects)	gs1
89% to 70% (Most of the proceeds are allocated to green projects or social projects)	gs2
69% to 50% (More than half of the proceeds are allocated to green projects or social projects)	gs3
49% to 30% (Less than half of the proceeds are allocated to green projects or social projects)	gs4
29% to 10% (Very low amount of the proceeds are allocated to green projects or social projects)	gs5
Below 10%	Not qualified

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

In this phase, JCR evaluates the issuers' management and operation systems and the degree of transparency based on the 4 evaluation items, which follows the GBP and SBP. The evaluation results are classified into 5 grades from "m1" to "m5."

Evaluation scores by grade	Evaluation grade
100 to 80 (AM system is well developed and the degree of transparency is very high. The project implementation and allocation of the proceeds are highly likely to be made as were planned.)	m1
79 to 60 (AM system is developed and the degree of transparency is high. The project implementation and allocation of proceeds are expected to be made as were planned.)	m2
59 to 40 (AM system and the degree of transparency have some problems and there is a little concern that the plan and the fund allocation will not be processed as were planned.)	m3
39 to 20 (AM system and the degree of transparency have problem and there is a concern that the plan and the fund allocation will not be processed as were planned.)	m4
Below 20 (AM system and the degree of transparency have serious problems and it is difficult to expect the plan and the fund allocation will be processed as were planned.)	m5



3. Evaluation Phase 3: Overall Evaluation

In phase 3, JCR determines an overall evaluation from SU 1 to SU 5, based on greenness and social beneficial impacts evaluation (gs1 to gs5), adding up the management, operation and transparency evaluation (m1 to m5).

JCR uses JCR Sustainability Finance Evaluation Matrix for determining the overall evaluation as shown below:

SU 1 is the highest sustainability finance evaluation in JCR Sustainability Finance. This is assigned to those which get the highest evaluation in both "greenness and social beneficial impacts evaluation and "management, operation and transparency evaluation".

Management, Operation & Transparency						
		m1	m2	m3	m4	m5
Greenness	gs1	SU 1	SU 2	SU 3	SU 4	SU 5
-	gs2	SU 2	SU 2	SU 3	SU 4	SU 5
& Social Impact	gs3	SU 3	SU 3	SU 4	SU 5	Not qualified
<u> </u>	gs4	SU 4	SU 4	SU 5	Not qualified	Not qualified
Beneficial	gs5	SU 5	SU 5	Not qualified	Not qualified	Not qualified

<JCR Sustainability Finance Evaluation Matrix>

4. Evaluation symbols

JCR Sustainability Finance Evaluation symbols are expressed by the combination of "Greenness and Social Beneficial Impacts Evaluation," "Management, operation & Transparency Evaluation (m1 to m5)" and "Overall Evaluation (SU 1 to SU 5)."

<JCR Sustainability Finance Evaluation Results>

Overall Evaluation	SU 1 ~ SU 5
Greenness and Social Beneficial Impacts Evaluation (Use of Proceeds)	gs1 ~ gs5
Management, operation and Transparency Evaluation	m1 ~ m5

IV Evaluation methodology (Evaluation factors and scoring)

When evaluating greenness and social beneficial impacts, JCR checks, evaluate and scores in compliance with "JCR Green Finance Evaluation" and "JCR Social Finance Evaluation."



V Assumptions and limit of this evaluation

JCR Sustainability Finance Evaluation is to affirm that the positive impacts on environment or social benefits at the time of planning the financing or the time of financing are appropriately calculated quantitatively or qualitatively by the issuers or the third parties. This evaluation will not guarantee such impacts will continue in the future.

Positive and negative impacts of green projects or social projects on environment or social benefits are calculated internally or by external institution by the request of issuers. JCR evaluates the impacts based on this calculated results and it will not calculate the impacts by itself.

VI Evaluating Sustainability Finance Framework

At the request of the issuers, JCR may conduct a Sustainability Finance Framework Evaluation of their sustainability finance policy to confirm compliance with the GBP, SBP, SBG, etc.

In such a case, this evaluation method shall apply, but the evaluation symbol shall be indicated by (F) at the end of the evaluation symbol.

Evaluation of the Sustainability Finance Framework involves evaluation of the Sustainability Finance Framework of the issuers, and does not include greenness and social impacts evaluation, and management, operation and transparency evaluation of the individual uses of proceeds implemented based on the sustainability finance framework.

VII Periodical review

JCR may implement periodical review, if the issuers find the necessity to follow up the unallocated funds and planned reporting after conducting sustainability finance.

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Green Project listed in Green Bond Principle by ICMA and Green Bond Guidelines 2017 by Ministry of Environment

ICMA GBP	MOE Guidelines
Renewable energy (including production, transmission, appliances and products);	 Renewable energy (including production, transmission, appliances and products) Renewable energy power generation projects, including solar power, wind power, mid and small sized water power, biomass, geothermal power. Projects to install transmission or energy storage battery, to maintain, coordinate the demand and supply and store the energy which are generated by renewable energy Projects to produce appliances and products such as solar panels, transmission wires, energy storage batteries, which are used for the above projects Projects which use renewable energy power such as solar, geothermal power, etc.
Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products); Green buildings which meet regional, national or internationally recognized standards or certifications.	 Energy efficiency (including construction and of energy efficiency buildings, renovations to energy efficient buildings, air conditioning of the energy storage area, smart grid and appliances) Net Zero Energy House (ZEH), Net Zero Energy Building (ZEB) and other construction of energy efficiency buildings Renovating the existing buildings such as office, factories and houses to acquire the environment authentication such as LEED CASBEE BELS Projects to install appliances or facilities which are energy efficient to office, factories, houses, etc. Development and installation of smart grid related appliances
Pollution prevention and control (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy)	 Pollution prevention and management (including waste water treatment, reduction of greenhouse gas control, soil remediation, waste recycling and associated environmental monitoring) Projects to realize circular economy (Designing and producing energy efficient and long-life products, inverse, manufacturing and advanced waste treatment (including recycling and energy collection) Projects to control the emission of hazardous chemical by preventing leakage, volatilization and penetration. Projects to install facilities of advanced treatment and reuse of waste water from factories. Projects to treat soil contamination
Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally - sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);	 Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture, fisheries and aqua culture, forestry; IPM (Integrated Pest Management) of pests, drip irrigation) Projects to acquire the certifications for sustainability such as MSC, ASC for fisheries and aquaculture. Projects to acquire the certification for sustainability such as FSC for forestry. Afforestation projects



ICMA GBP	MOE Guidelines
Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);	 Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments) Projects to conserve wetland and coral leaf. Projects to preserve and redevelop village-vicinity mountain and ocean Projects to regenerate river protected shore to near-natural.
Clean transportation (such as electric, hybrid, public, rail, non- motorized, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);	 Clean transportation (low pollution emission cars such as electric, hybrid cars, public transportation, railways, bicycles, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions) Projects to develop and produce pollution emission cars such as electric, hybrid cars and to develop its infrastructure Projects to improve efficiency in development of planned physical distribution base, intensive transportation and distribution Projects to introduce equipment to support eco-driving (digital type operation recorders) Projects for developing facilities of park and ride and car sharing
Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation);	 Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation); Projects to preserve hydrologic cycle such as water source cultivation or soil infiltration of rain water (including developing green infrastructure) Projects to develop facilities for flood mitigations Desalination projects
Climate change adaptation (including information support systems, such as climate observation and early warning systems);	 Climate change adaptation (including information support systems, such as climate observation and early warning systems); Projects to strengthen disaster prevention of distribution, railways, harbor, airport, road and water related infrastructure, waste treatment facilities and traffic safety devices
Eco-efficient and/or circular economy adapted products, production technologies and processes (such as development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging and distribution);	 Eco-efficient and/or circular economy adapted products, production technologies and processes (such as development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging and distribution); Projects to produce the production which could acquire environmental certifications Projects to implement R&D and introduction of greenhouse emission reduction technologies and products.

(Source) ICMA website : https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/green-bond-principles-gbp/ Ministry of Environment website : https://www.env.go.jp/press/files/jp/105353.pdf