

REQUEST FOR COMMENT

Green Bonds Assessment (GBA) Proposed Approach and Methodology

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Summary

We are seeking feedback in response to our proposed Green Bond Assessment (GBA) methodology. Our GBA would provide an evaluation of the bond issuer's management, administration, allocation of proceeds to and reporting on environmental projects financed with the proceeds derived from green bond offerings.

Our assessment process will score each bond issue on five key factors (along with their respective sub-factors), weighted to reflect their relative importance, to arrive at a composite grade. The composite grade, in turn, will inform an overall assessment that runs from 5 (Excellent) to 1 (Poor). After a GBA is initially assigned, it may be refreshed periodically, based on information provided in the issuer's subsequently issued annual reports.

After the transaction comes to market, we may periodically refresh the GBA.

We invite market participants to comment on the Request for Comment by February 12, 2016 by submitting their comments on the Request for Comment page on www.moody's.com.

Introduction

Green Bond Assessments¹ are not credit ratings; rather, they are forward-looking opinions of the relative effectiveness of the issuer's approach for managing, administering, allocating proceeds to and reporting on environmental projects financed by green bonds. As such, GBAs assess the relative likelihood that bond proceeds will be invested to support environmentally beneficial projects as designated by the issuer. GBAs provide a relative assessment of green bonds with the intention of assisting investors in their evaluation of various bond offerings across the universe of Moody's rated bonds².

This methodology article explains Moody's approach to assessing green bonds issued by corporations, financial institutions, governments, supranational organizations, municipalities as well as other entities. Also included are project finance, as well as structured finance transactions, such as asset backed securities (ABS). This methodology is intended to inform issuers, investors, financial intermediaries and other interested market participants about Moody's green bond assessment definitions and symbols, assessment process, information sources, the key factors and sub-factors, and how these are scored to derive a green bond assessment.

¹ A Green Bond Assessment is not a rating and is considered an Other Permissible Service (OPS).

² Initially, Moody's GBAs will be assigned on an as requested basis to debt instruments to which Moody's has assigned a credit rating. Stand-alone assessments will also be offered.

The initial assessment of green bonds and their use of proceeds involves an examination of relevant governing documentation, regulatory filings, issuer reports and presentations, if any, as well as all other publicly available information. Information derived from these sources is informed by a direct engagement and dialogue with the issuer.

The combined inputs are used to evaluate the transaction, via a scorecard, the details of which are set forth herein, and assign the GBA. GBA assessments are expressed using a five-point relative scale, ranging from GBA 5 (Excellent) to GBA 1 (Poor). Once assigned and communicated to the issuer, the GBA assessment is disseminated publicly via a press release distributed through various newswire services. It is also maintained on Moody's.com. This is followed by the publication of a GBA Assessment Report that is also available to investors on www.moody's.com.

Once an assessment has been issued and published -- via the issuance of a press release and research report -- the assessment may be refreshed periodically to take into consideration the application of proceeds, reported progress against the initial plans for investments and their environmental impacts, and continuing issuer disclosures.

Assessment Symbols and Scale

Green Bond Assessments-) are forward-looking opinions on the relative effectiveness of the approach adopted by green bond issuers to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings.

Green Bond Assessments are expressed using a scale ranging from 5 (Excellent) to 1 (Poor) that encapsulates Moody's views, distilled from an evaluation of five broad factors that are weighted, as follows: Organization (10%), Use of Proceeds (40%), Disclosure on the Use of Proceeds (15%), Management of Proceeds (15%), and Ongoing Reporting and Disclosure (20%). Each factor is evaluated on the basis of various sub-factor considerations that are, in turn, scored.

Moody's assessments are designed to offer investors a more granular and transparent view of the practices governing the management, administration and reporting undertakings of green bonds across the globe.

Refer to Table 1 for the scale and definitions of Green Bond Assessments.

Defining Green Bonds

Green bonds are defined as fixed-income securities, both taxable and tax-exempt, that raise capital for use in projects or activities with specific climate or environmental sustainability purposes. These include debt obligations with direct recourse to issuers, project finance or revenue bonds, with and without recourse to issuers, and securitizations that collateralize projects or assets whose cash flows provide the first source of repayment.

Regardless of structure, green bonds are generally issued pursuant to a set of voluntary guidelines or framework known as the Green Bond Principles (GBP)³. The GBP guidelines include criteria for the use of proceeds, the issuer's process for project evaluation, the management of proceeds, and reporting on a periodic basis. That said, there are variations around the interpretation and application of these GBP guidelines, including the potential use of and reliance upon internal or external third-party assurances or certifications.

³ Refer to Green Bond Principles (GBP)

Under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), 195 nations supported the 12 December 2015 Paris Agreement, which aims to reduce greenhouse gas emissions to levels consistent with holding the increase in the global average temperature to well below 2° Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° Celsius above pre-industrial levels. Meeting these targets will require an unprecedented allocation of capital, measured in trillions of dollars a year.

Green bonds are gaining attention for their potential role in mobilizing capital toward environmental solutions. Capital market financing needs -- in combination with growing investor demand, standardization of offerings, and the issuance of benchmark-sized deals that are effectively priced, both investment grade and potentially speculative or non-investment grade -- are expected to lift green bond issuance in the years to come.

Assessment Approach and Methodology

We use a scorecard with the following five factors, each of which is comprised of five sub-factors.

1. Organization
2. Use of Proceeds
3. Disclosure on the Use of Proceeds
4. Management of Proceeds
5. Ongoing Reporting and Disclosure

Each of the five factors is weighted, as follows: Organization (10%), Use of Proceeds (40%), Disclosure on the Use of Proceeds (15%), Management of Proceeds (15%), and Ongoing Reporting and Disclosure (20%).

Each of the five factors is scored on a scale from 1 to 5. For factors 1, 3, 4, and 5, scoring is based on the number of sub-factors for which the stated criteria is satisfied. For example, in order to achieve a factor score of 5 the criteria for all five sub-factors must be satisfied. In the same way, in order to achieve a score of 4, four of the five sub-factors must be satisfied, etc. In contrast, scoring for factor 2 is based on qualitative and quantitative gradations that are shown in the scorecard.

Organization (10%)

Key Considerations: An organization structure that relies on dedicated personnel to set strategy and evaluate, qualify, approve as well as monitor environmental projects.

We evaluate the organization's mission to set goals, develop a broad strategic framework for the deployment of green bond proceeds, evaluate and approve individual projects. This includes the organization's structure and decision-making process, its process for determining the eligibility of projects or investments, as well as its framework for setting impact goals, measuring results relative to specific program-level and project-level objectives, and impact reporting.

We also consider the organization's engagements with or access to indirect internal or external environmental or related experts.

The sub-factors listed below frame our evaluation of the Organization factor. In scoring this factor, we attribute one point for meeting the criteria for each of the five sub-factors. For example, if the criteria for all five sub-factors are satisfied, the score for this factor would be "5" and if the criteria for three sub-factors are satisfied, the factor score would be "3".

Sub-Factor	5	4	3	2	1
(1) Governance and organization structure appears to be effective.	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
(2) Policies and procedures enable rigorous review and decision making processes.					
(3) Qualified and experienced personnel.					
(4) Explicit and comprehensive criteria for investment selection, including measurable impact results.					
(5) External evaluations provided by third parties for decision-making.					

Use of Proceeds (40%)

Key Considerations: The deployment of green bond proceeds pursuant to a broadly adopted framework and in line with one or more environmentally beneficial project categories as set forth in the Green Bond Principles. Our assessment is focused on the use of proceeds that are evaluated relative to broad categories of potential eligible green projects explicitly recognized by the Green Bond Principles as well as the percentage of green bond proceeds invested directly into such projects. The eight categories are: renewable energy, energy efficiency (including efficient buildings), sustainable waste management, sustainable land use (including sustainable forestry and agriculture), biodiversity conservation, clean transportation, clean water and/or drinking water, and climate change adaptation. The scoring for the use of proceeds factor will be based upon our qualitative and quantitative assessment of how the use of proceeds fits within the eight categories under the Green Bond Principles as well as the percentage of proceeds invested in such categories. Should these principles change over time, our assessment would reflect any new or revised categories.

In order to achieve a score of 5, over 90% of proceeds are invested directly in eligible projects, whereas a score of 4 corresponds to greater than 80% but less than 90% of proceeds invested directly in eligible projects, etc.

Sub-Factor	5	4	3	2	1
Percentage of green bond proceeds invested in accordance with one or more categories that is enumerated under the Green Bond Principles.	>=90%	>80% and <90%	>50% and <80%	>25% and <50%	<25%

Disclosure on the Use of Proceeds (15%)

Key Considerations: These include the quality and transparency of disclosures, as well as project funding practices.

Our assessment will extend to include the issuer's funding practices as well as investment time horizons. In any case, our assessment of project categories and funding practices will be informed by the quality and transparency of disclosures provided in offering and any related documents. These will be scored as indicated below:

Sub-Factor	5	4	3	2	1
(1) Detailed description of green projects.	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
(2) Differentiation between new investments versus refinancing.					
(3) Adequate funding to complete the project.					
(4) Quantitative measures for targeted results for each investment.					
(5) Detailed criteria on the method for calculating performance against targeted results.					

Management of Proceeds (15%)

Key Considerations: Practices and procedures applicable to the segregation and tracking of proceeds, temporary investment practices pending distribution or investment in eligible projects, as well as the proposed disclosure methods around these processes.

Our evaluation focuses on the procedures and practices applicable to the segregation, tracking of proceeds, temporary investment practices, as well as public disclosure practices and clarity. In the process, we positively consider any internal tracking methods that are reviewed or audited by an independent party either within the organization or via external third parties. These will be scored as indicated below:

Sub-Factor	5	4	3	2	1
(1) Bond proceeds are segregated and separately tracked on an accounting basis.	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
(2) Application of proceeds is tracked by environmental category and project type.					
(3) Robust process for reconciling planned investments against actual allocations.					
(4) Clear eligibility rules for investment of cash balances.					
(5) Audit by external organization or internal audit unit.					

Ongoing Reporting and Disclosure (20%)

Key Considerations: Transparency, quality and frequency of reporting and disclosure practices, as well monitoring methods.

We evaluate the nature of expected periodic updates and their frequency – with regard to specific projects and the dollars invested in those projects – and which may be made available to investors via newsletters, website updates, or published financial reports.

In addition, our evaluation focuses on the issuer's expected disclosures regarding environmental impacts, including the adoption and reliance on objective metrics for measuring both positive and negative outcomes, if any.

Key considerations will be scored as indicated below:

Sub-Factor	5	4	3	2	1
(1) Initial reporting and disclosure after issuance provides detailed status update on investments.	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
(2) Ongoing annual reporting is expected over the life of the bond.					
(3) Disclosures provide granular detail on the nature of the investments and their expected environmental impacts.					
(4) Detailed reporting provides a quantitative indication of the environmental impacts actually realized to date.					
(5) Reporting includes quantitative explanation of how the realized economic impacts compare to projections at the time the bonds were sold.					

Note of explanation: Disclosure coverage relies as much as possible on quantitative metrics in such areas as: project/investment designation (adaptation versus mitigation), levels of commitment versus allocations, expected or targeted results across various categories, such as annual energy savings, annual GHG emissions avoided, water recycled/reused, and waste disposal or diversion, etc.

Periodic Assessment Updates

Once an assessment has been issued and published via the issuance of a press release and research report, the assessment may be refreshed periodically to take into consideration the application of proceeds and to consider the environmental impacts of projects undertaken, based on issuer disclosures relative to the initial scorecard results.

EXHIBIT 1

Assessment Scale and Definitions

Grade	Detail	Definitions
5	Excellent	Green bond issuer has adopted an excellent approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are excellent.
4	Very Good	Green bond issuer has adopted a very good approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are very good.
3	Good	Green bond issuer has adopted a good approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are good.
2	Fair	Green bond issuer has adopted a fair approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are fair.
1	Poor	Green bond issuer has adopted a poor approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are poor.

Moody's Related Research

Special Comment:

- » [Green Bonds Start to Bloom, May 2015 \(1002584\)](#)

Sector In-Depth:

- » [Paris Agreement Advances Adoption of Carbon Regulations; Credit Impact to Rise, December 2015 \(1011009\)](#)
- » [Moody's Approach to Assessing the Credit Impacts of Environmental Risks, November 2015 \(1010009\)](#)
- » [Heat Map Shows Wide Variations in Credit Impact Across Sectors, November 2015 \(1009845\)](#)
- » [Third Quarter Issuance Lags, but COP21-Linked Increase Is Likely, October 2015 \(1009140\)](#)
- » [Moody's Approach to Assessing ESG Risks in Ratings and Research, September 2015 \(1007087\)](#)
- » [Green Bonds Issuance Picks Up Pace During the Second Quarter, August 2015 \(1006914\)](#)

Sector Comment:

- » [Municipal Green Bond Issuance Set to Exceed Fourth Quarter with Early 2016 Activity, January 2016 \(1012863\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Report Number: 179809

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