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# Green Bonds Assessment (GBA)

SEB Climate Finance Summit

# Agenda

## 1. Key Messages

## 2. Green Bond Assessment (GBA)

- » GBA Scorecard
- » GBA Assessment Process

## 3. Appendix

- » Green Bonds Market Update Q1'16
- » Green Bond Market 2015 and 2016 Outlook

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# Key Messages

# Green Bonds Assessment – Key Messages

## Green Bonds

- Green bonds are no different than conventional bonds, except that bond proceeds are earmarked for environmentally beneficial projects.
- Issued by corporations, financial institutions, development banks, sub-sovereign, US public finance, and in form of structured transactions.
- Almost \$100 billion issued to-date.

## Assessment Process

- Forward looking opinion of the relative effectiveness of an issuer's approach to managing, administering, allocating proceeds to and reporting on environmental projects financed with green bond proceeds.
- Five key factors analyzed, using a scorecard.
- Grades range from GB1-GB5.

## Initiative & Motivation

- One leg of ESG initiative.
- Role for Moody's in promoting further disclosure and transparency and set a standard for green bond issuances across sectors and geographies.
- Meet needs of issuers and investors.
- First NRSO to offer GBA.

## Green Bond Assessment

- Requested assessment.
- Publicly available information supplemented by issuer provided input
- Issuer interaction.
- Committee process, PR and green bond report disseminated.
- Annual refresh or in line with issuer's reporting cycle on use of proceeds.

# 2

## Green Bond Assessment (GBA)

# Green Bonds Assessment (GBA)

- 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.
- Allocation of proceeds based on categories as determined based on issuer's adopted policies and the categories established under the Green Bond Principles (GBP) that will be further informed by one or more robust taxonomies and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
- Opinion excludes view about "green" nature of projects.
- First two GBA's assigned:
  - GB1 to TenneT Holding B.V. Green Medium Term Note Offering
  - GB1 to GREEN STORM 2016 B.V., a Dutch green residential mortgage-backed securitization (RMBS)

# Green Bonds Assessment Scorecard (1/2)

Assessment Factor	Weight
1. Organization	15%
2. Use of proceeds	40%
3. Disclosure on the use of proceeds	10%
4. Management of proceeds	15%
5. Ongoing reporting and disclosure	20%

## Explanation

- 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 1 the criteria for all five sub-factors must be satisfied. In the same way, in order to achieve a score of 2, 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.

# Green Bonds Assessment Scorecard (2/2)

Assessment Scale and Definitions		
Grade	Range	Definitions
GB1	≤ 1.5	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.
GB2	1.5 - 2.5	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.
GB3	2.5 - 3.5	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.
GB4	3.5 - 4.5	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.
GB5	> 4.5	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.



# Green Bonds Assessment Process

- Initial assessment: Relevant governing documentation, regulatory filings, issuer reports and presentations, if any, as well as all other publicly available information. Also, direct engagement and dialogue with the issuer.
- The combined inputs are used to evaluate the transaction, via a scorecard.
- GB grade will be assigned by Committee.
- GBA will be disseminated publicly via a **press release** distributed through various newswire services.
- This is followed by the publication of a **GBA Report** that will also be available to investors on Moodys.com.
- 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.

## Factor 1: Organization (15%)

#	Sub-factor
1	Environmental governance and organization structure appears to be effective.
2	Policies and procedures enable rigorous review and decision making processes.
3	Qualified and experienced personnel and/or reliance on qualified third parties.
4	Explicit and comprehensive criteria for investment selection, including measurable impact results.
5	External evaluations for decision making in line with project characteristics.

## Factor 2: Use of Proceeds (40%)

Score	Sub-factor
1	>95% - 100% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
2	90% - <95% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
3	80% - <90% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
4	50% - <80% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
5	<50% of proceeds allocated to eligible projects that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.

## Factor 3: Disclosure on the Use of Proceeds (10%)

#	Sub-factor
1	Description of green projects, including portfolio level descriptions, actual and/or intended.
2	Adequacy of funding and/or strategies to complete projects.
3	Quantitative and/or qualitative descriptions for targeted environmental results.
4	Methods and criteria, both qualitative or quantitative, for calculating performance against targeted environmental results.
5	Issuer relies on external assurances: Second party reviews, audits and/or third party certifications.

## Factor 4: Management of Proceeds (15%)

#	Sub-factor
1	Bond proceeds are segregated and separately tracked on an accounting basis or via a method by which proceeds are earmarked.
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 independent internal audit unit.

## Factor 5: Ongoing Reporting and Disclosure (20%)

#	Sub-factor
1	Reporting and disclosure post issuance provides/to be provided detailed and timely status updates on projects.
2	Ongoing annual reporting is expected over the life of the bond.
3	Disclosures provide granular detail on the nature of the investments and/or their expected environmental impacts.
4	Reporting provides/to be provided a quantitative and/or qualitative assessment of the environmental impacts actually realized to-date.
5	Reporting includes/to include quantitative and/or qualitative explanations of how the realized environmental impacts compare to projections at the time the bonds were sold.

# Scorecard Illustration

Assessment Factor	Weight	Green Bond X	Green Bond Y
Org. structure & decisions	15%	1	1
Use of proceeds	40%	1	5
Disclosure on use of proceeds	15%	2	1
Management of proceeds	10%	3	1
Ongoing reporting/discl.	20%	1	1
Average weighted score		1.4	1
Grade		GB1	GB5
Definition		Excellent	Poor

# 3

## Appendix



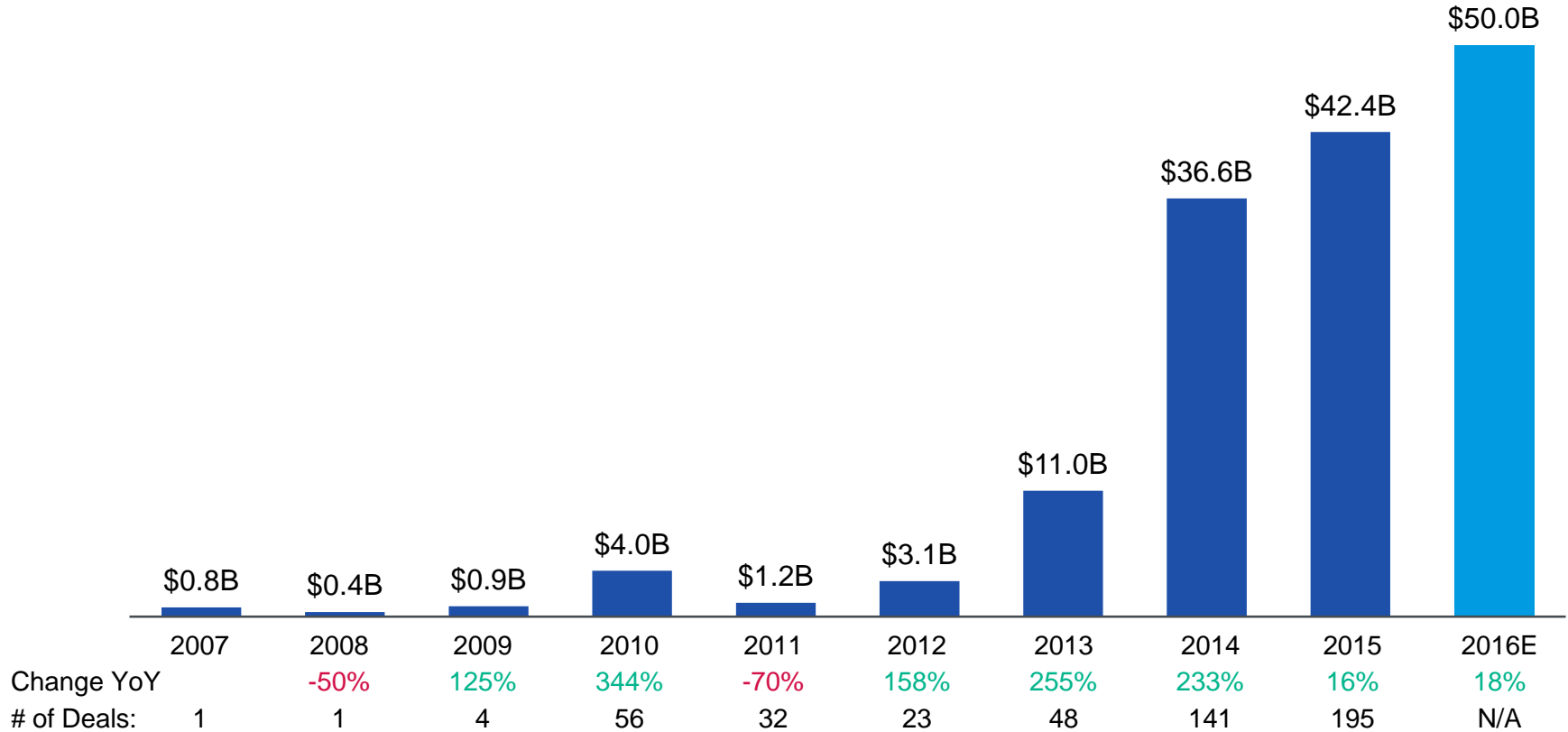
# Green Bonds Market Update 1<sup>st</sup> Quarter 2016\*

- Green bond volumes in first quarter 2016 running ahead of 2015.
  - Monthly issuance has been higher than equivalent period in 2015 but in line with strong 4th quarter 2015 issuances, reaching almost \$17 billion for the quarter.
  - Extrapolating first quarter growth, 2016 trajectory is about \$68 billion, or about \$26 billion higher than 2015, for a potential increase of 68%.
  - Observations: New Schuldschein green security type offered; China green bonds lead other jurisdictions in first quarter.
- Stress in the non-investment grade segment: Abengoa Greenfield, SA, TerraForm Power Operating LLC and TerraForm Global Operating LLC.
- Post COP21 developments: Challenges in implementing INDCs; preliminary data published by the International Energy Agency (IEA) show that the amount of carbon dioxide released in 2015 is about the same as was released in 2014 and 2013.

\*Based on preliminary data 4-4-2016

# Green Bond Market 2015 and 2016 Outlook

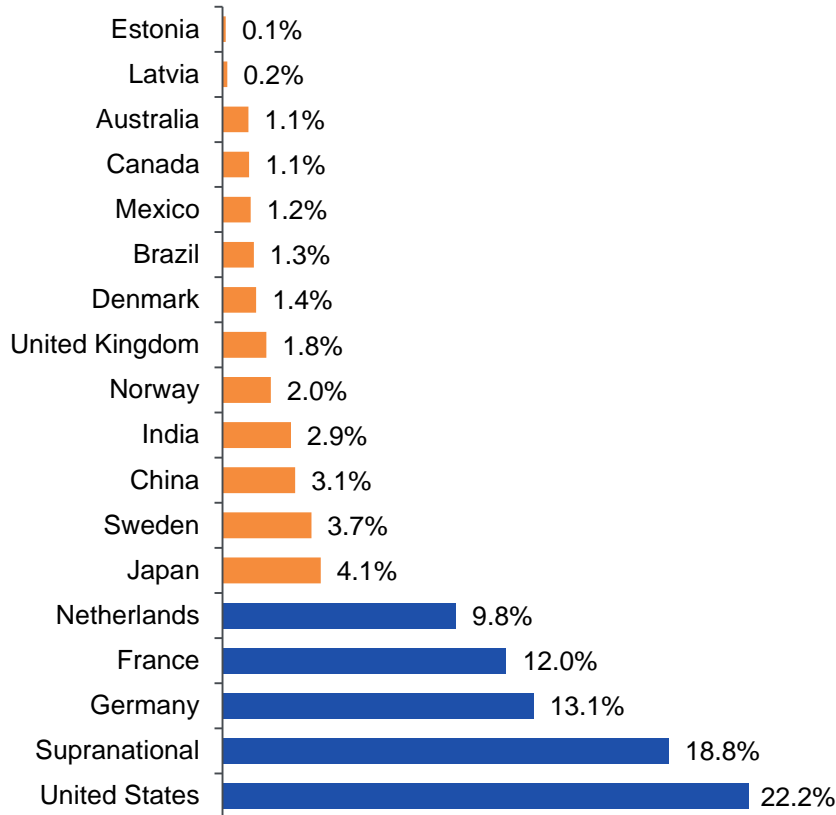
Green Bond Issuance Volume Per Year



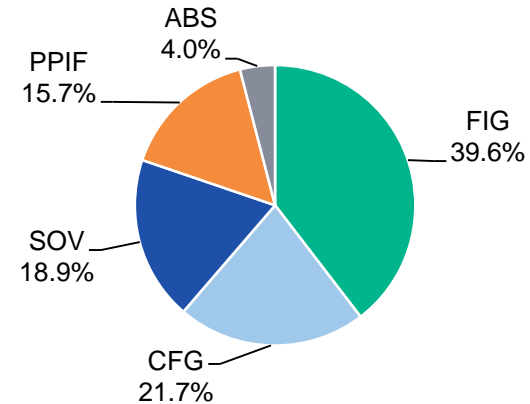
Source: Climate Bonds Initiative, Environmental Finance, Dealogic, Bloomberg, MSRB Electronic Municipal Market Access, various issuer websites, OANDA currency converter, MIS

# Green Bond Market 2015 and 2016 Outlook

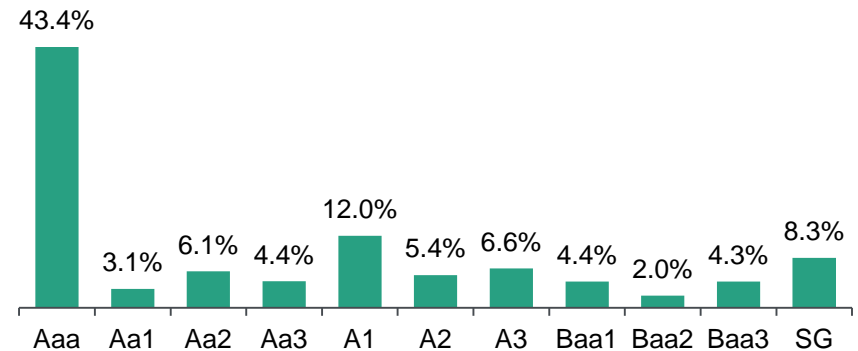
2015 Volume by Geography



2015 Volume by Issuer Type



2015 Volume by Rating Category



Source: Climate Bonds Initiative, Environmental Finance, Dealogic, Bloomberg, MSRB Electronic Municipal Market Access, various issuer websites, OANDA currency converter, MIS

# Moody's Green Bonds Topic Page

## Green Bonds

Since their introduction in 2007, green bonds have gained 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. This topic page aggregates Moody's green bonds oriented research, covering trends and developments, relevant company specific research and green bond assessments as well as related environmental topics more broadly.

### Highlights

31 Mar 2016

**Green Bonds Assessment Methodology has published**  
The Green Bonds Assessment (GBA) methodology explains how Moody's evaluates a green bond based on five key factors. The methodology offers a consistent, standardized and transparent framework for evaluating an issuer's approach for managing, administering, and allocating proceeds to and reporting on environmental projects financed by green bonds across various security types globally... [Full Report](#)

27 May 2015

**Green Bonds Start to Bloom**  
First launched in 2007, green bonds reached nearly \$37 billion by 2014, and issuance continues to rise. Green bonds play a role across diverse sectors in channeling public funds and private capital to sustainability projects that are intended to mitigate global warming. We anticipate greater volumes and a wider range of issuers, maturities, currencies and bond features to materialize as the market develops... [Full Report](#)

### Research & Ratings

#### Research

[View All »](#)

Date	Document Type	Title	Issuer/Entity
30 Mar 2016	Announcement	<a href="#">Moody's launches new Green Bond Assessment service</a>	
30 Mar 2016	Announcement	<a href="#">Moody's publishes methodology on Green Bonds Assessment</a>	
30 Mar 2016	Rating Methodology	<a href="#">Green Bonds Assessment (GBA)</a>	
22 Feb 2016	Issuer Comment	<a href="#">Apple's First Green Bond Includes Rigorous Voluntary Verification Guidelines</a>	Apple Inc.
01 Feb 2016	Sector In-Depth	<a href="#">Green Bonds - Global: Issuance Achieves Record Volume in 2015, Could Exceed \$50 billion in 2016</a>	

### RELATED INFORMATION

[> Research on Environmental Risks and Developments](#)

### UPCOMING EVENTS

06 Apr 2016  
Moody's Global Teleconference Series (APAC): Green Bonds Assessment Methodology (10:00 Hong Kong / 11:00 Tokyo / 12:00 Sydney), 6 April 2016

06 Apr 2016  
Moody's Teleconference: Green Bonds Assessment Methodology (Americas/EMEA)  
[More >>](#)

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