



Japan's Green Bond Guidelines

Overall illustration of environmental finance policies and individual initiatives

- ✓ Prepare and publish a commentary that sorts concepts etc. that institutional investors and other parties in the investment chain can refer to in taking ESG actions. (ESG Working Group)

**Institutional investors
Financial institutions**



- ✓ Raising awareness of and promoting initiatives by financial institutions through the support of the implementation of "Principles for Financial Action towards a Sustainable Society (Principles for Financial Action for the 21st Century)".
- ✓ Promoting environment rating-based lending to companies that proactively work on environmental management through the interest subsidy project.
- ✓ Promoting the use of leased low carbon equipment through Eco-Lease Promotion Project.

Considering environment in pursuit of expanding medium and long-term earnings leads to an increase in lending and investment



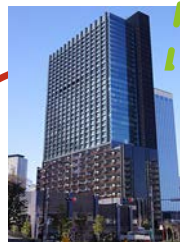
Environment information



Operating Environment Information Disclosure System for encouraging the use of environment information by investors etc.

Finance encouraging corporate behaviors to become environment-friendly

- ✓ Supporting regional low carbon projects (renewable energy etc.) with green funds financing them; encouraging the flow of funds from private-sector financial institutions etc. to such projects.
- ✓ Disseminating information about green financial instruments (Green Bonds, renewable energy funds etc.). (Green Investment Study Group, Green Bond Guidelines, and development of case examples of Green Bond issuance)



Companies not working on environmental management

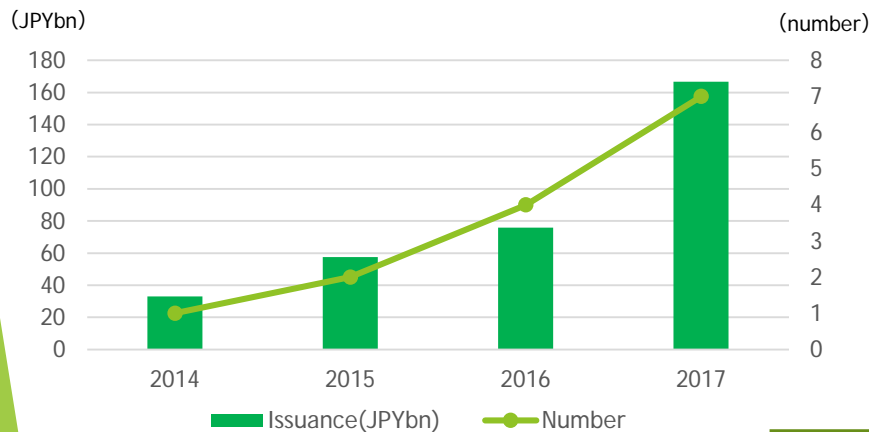


Companies working on environmental management and on environment-related businesses

Objectives of the formulation of the Green Bond Guidelines 2017

- Achieving the 2°C target and SDGs requires a huge amount of investment into Green Projects.
- Covering all of it with public funds is not realistic. Infusion of significant private-sector funds is needed.
- Green bonds are effective tools for infusing private-sector funds into Green Projects.

Annual amount of Green Bond issuance in Japan



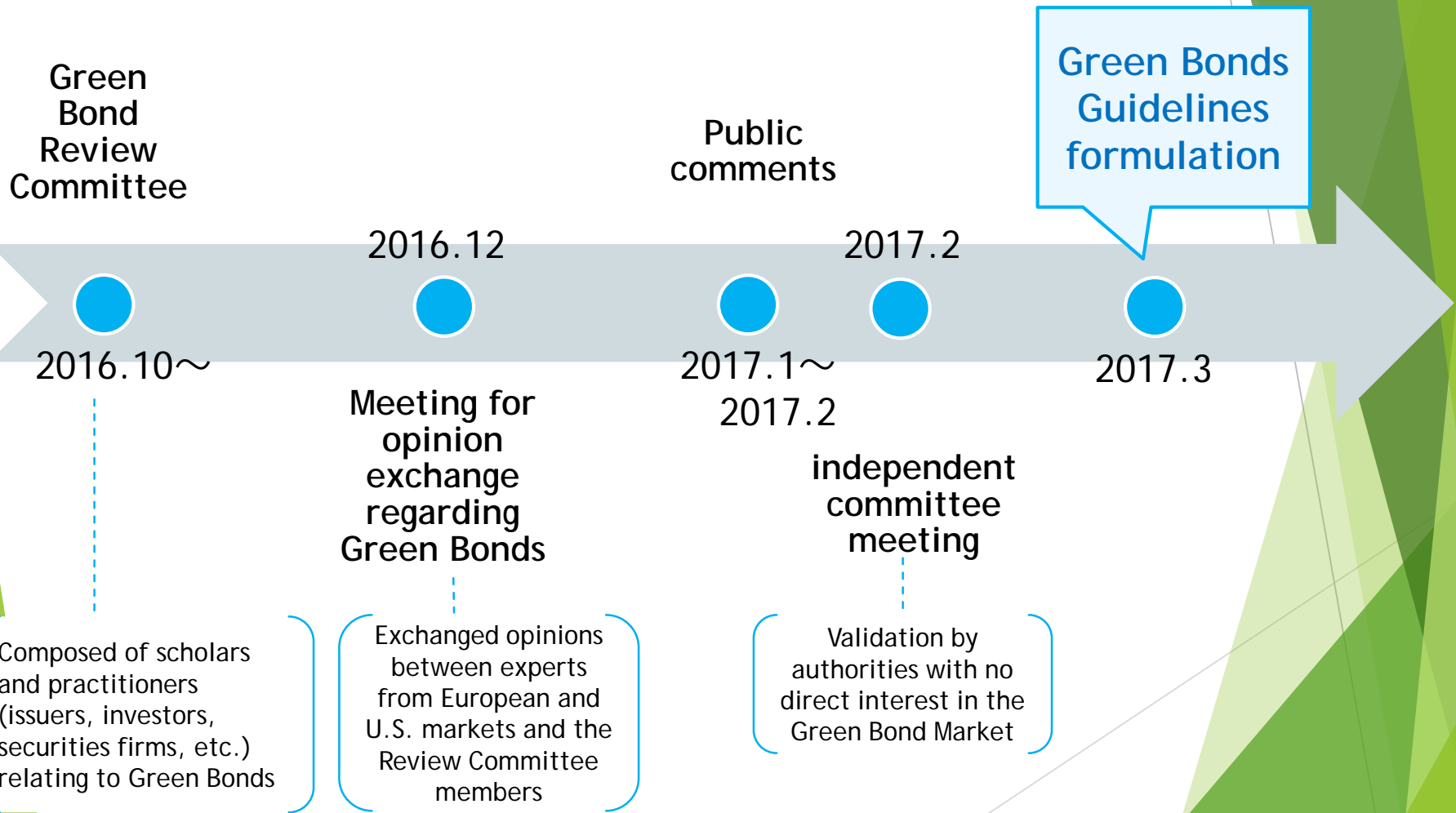
Currently issuance of Green Bonds by Japanese companies etc.

Issue Date	Issure	Amount Issued
2017/10	Sumitomo Mitsui Financial Group	€500m
2017/10	Mizuho Financial Group	€500m
2017/10	Tokyo Metropolitan Government	¥10bn (for institutional investors)
2017/11 (scheduled)	JRTT	¥20bn



Need to aim for further promotion of Green Bond in Japan₂

Background of the formulation of the Green Bond Guidelines 2017

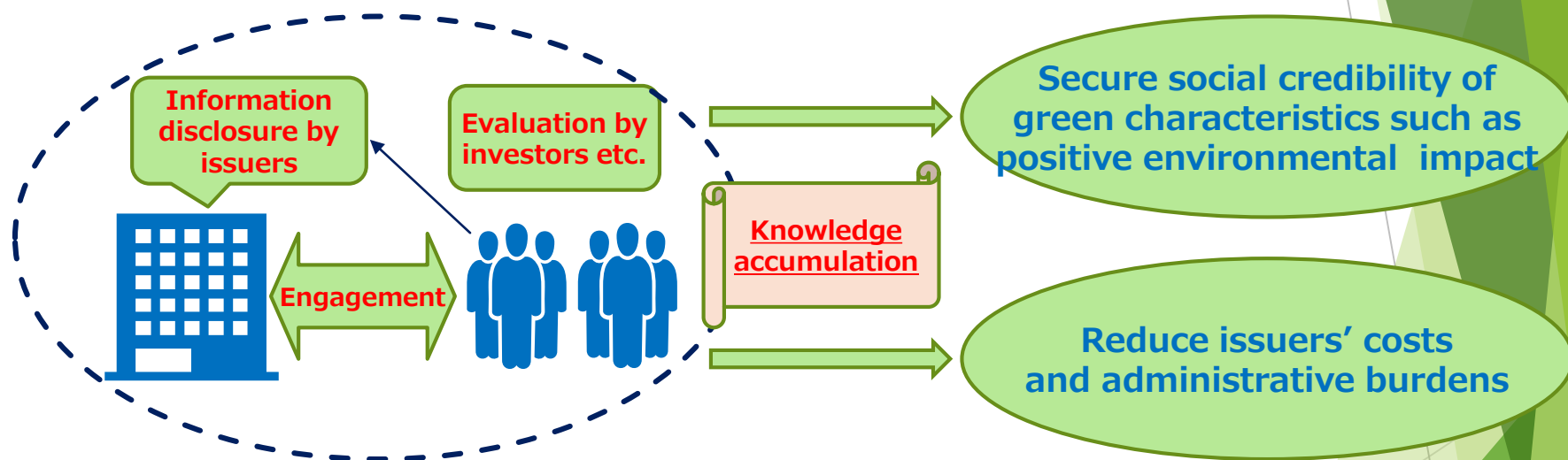


Key points of the Green Bond Guidelines 2017

1. Secure credibility of green characteristics and reduce issuers' costs and administrative burdens at the same time
2. Consistency with the Green Bond Principles
3. For Practical Use

Key points of the Green Bond Guidelines 2017

1. Secure credibility of green characteristics and reduce issuers' costs and administrative burdens at the same time



- Sufficient information disclosure by issuers is imperative.
- Preventing the issuance and investment in “green wash bonds” in the market through investors and other market participants’ evaluation of information disclosed by the issuer, and engagement between them while ensuring issuers’ diverse approaches.

Key points of the Green Bond Guidelines 2017

2. Consistency with the Green Bond Principles (GBP)

- The Guidelines have been formulated with due consideration to consistency with the contents of GBP.
- Bonds that meet all requirements provided in the sentences with the word “should” would be considered internationally recognized as Green Bonds.

The Guidelines’ structure

Chapter 1: Introduction
Chapter 2: Overview of Green Bonds
Chapter 3: Elements which Green Bonds are expected to have and examples of possible approaches

1. Use of proceeds
2. Process for project evaluation and selection
3. Management of proceeds
4. Reporting
5. External review

Chapter 4: Model cases
Chapter 5: Revisions of the Guidelines

Elements are sorted as follows, and detailed approaches are indicated.

- ✓ **Elements described with the word “should”**
… Basic elements that bonds labeled as Green Bonds are expected to have
- ✓ **“Recommended” elements**
… Elements that are recommended for Green Bonds
- ✓ **Elements “to be considered”**
… Examples and interpretations

Key points of the Green Bond Guidelines 2017

3. For Practical Use (1)

Indicating examples of concrete approaches that issuers, investors and other practitioners participating in the market can refer to when they consider their detailed approaches to Green Bonds.

Examples of use of proceeds

Renewable energy

- Renewable energy generation;
- Renewable heat supply; and;
- Renewable energy storage, supply and demand control; etc.

Energy efficiency

- Constructing energy efficient buildings such as ZEH/ZEB;
- Remodeling buildings for energy efficiency; etc.

Pollution prevention and control

- Projects contributing to circular economy;
- Controlling release of hazardous chemical substances; etc.

Sustainable management of living natural resources

- Environmentally sustainable agriculture, fishery and forestry;
- Integrated pest management (IPM); etc.

Terrestrial and aquatic biodiversity conservation

- Protection of coastal, marine and watershed environment;
- Conservation of "sato yama" and "sato umi"; etc.

Clean transportation

- Development/manufacture of EVs/FCVs, and installing infrastructure for them;
- Improving logistic system efficiency; etc.

Sustainable water management

- Conservation of water cycle;
- Countermeasures against floods; etc.

Climate change adaptation

- Enhancing urban infrastructure capability to prevent weather-related disasters; etc.

Eco efficient products, production technology and processes

- Development and introduction of environmentally friendlier products;
- Resource efficient packaging and distribution; etc.

Examples of Model cases

<Case 2>

Case where **a financial institution** raises funds for **financing renewable energy or energy-saving projects**

<Case 5>

Case where **a financial company affiliated with an automobile manufacturing group** raises funds through securitization of loan claims for financing the purchase of low emission vehicles, utilizing a trust scheme

<Case 6>

Case where **a local government** raises funds for financing its flood control, waste disposal and/or other projects implemented as renewable energy projects and climate change adaptation projects

Examples of checklist

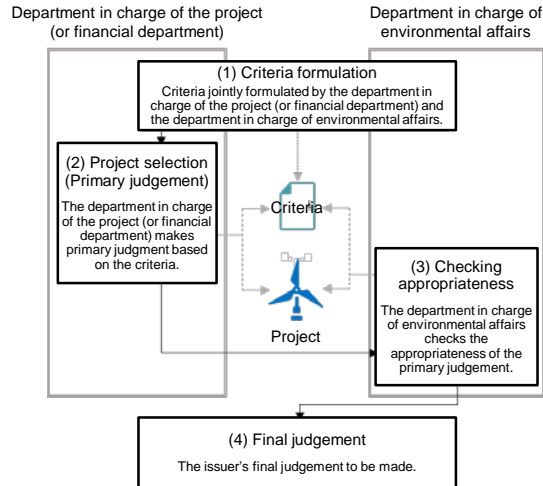
3. Management of proceeds			
✓ The issuer should track and manage the proceeds in an appropriate manner. The tracking and management should be controlled by the issuer in its internal process.	3-①	Should	
✓ As long as the Green Bond is outstanding, the issuer should periodically adjust to match the amount of the total proceeds to the sum of the amount of proceeds allocated to the Green Project and the amount of the unallocated proceeds.	3-②	Should	
✓ The issuer should provide investors in advance with information on how proceeds will be tracked and managed.	3-⑤	Should	
✓ It is recommended that the issuer keep evidenced documents showing they tracked and managed proceeds appropriately.	3-⑥	Recommended	
✓ The issuer should provide investors in advance with information on how unallocated proceeds will be managed.	3-⑧	Should	
✓ It is recommended that the issuer manage unallocated proceeds in assets with high liquidity and safety.	3-⑨	Recommended	

Key points of the Green Bond Guidelines 2017

3. For Practical Use (2)

Attaching illustration diagrams for descriptions difficult to understand

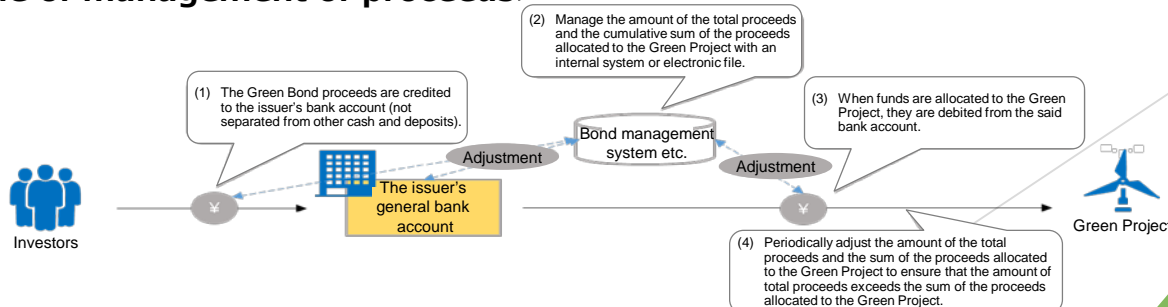
<Example of project selection processes>



<Example of reporting>

Project category	Project	Number of transactions	Amount allocated	Environmental benefits (CO ₂ reduction)
Renewable energy-related project	Photovoltaic power generation	○○ transactions	JPY ●●● bill.	○○○ t-CO ₂ /year
	Wind power generation	○○ transactions	JPY ●●● bill.	○○○ t-CO ₂ /year
	Storage battery production	○○ transactions	JPY ●●● bill.	○○○ t-CO ₂ /year
	Sub-total	○○ transactions (Of which, ○ refinancing transactions)	JPY ●●● bill. (Of which, JPY .●●● bill for refinancing)	○○○ t-CO ₂ /year
Energy efficiency-related project	Constructing energy efficient buildings	△△ transactions	JPY ▲▲▲ bill.	▽▽▽ t-CO ₂ /year
	Remodeling buildings for energy efficiency	△△ transactions	JPY ▲▲▲ bill.	▽▽▽ t-CO ₂ /year
	Sub-total	△△ transactions (Of which, △ refinancing transactions)	JPY ▲▲▲ bill. (Of which, JPY .▲▲▲ bill for refinancing.)	▽▽▽ t-CO ₂ /year
Project relating to environmentally friendly products and/or production technologies/processes	Production of products, for which to obtain environmental certification	□□ transactions	JPY ■■■ bill.	◇◇◇ t-CO ₂ /year
	Sub-total	□□ projects (Of which, □ refinancing transactions)	JPY ■■■ bill. (Of which, JPY .■■■ bill for refinancing.)	◇◇◇ t-CO ₂ /year
Total		XX transactions (Of which, □ refinancing transactions)	JPYX.X bill. (Of which, JPY .■■■ bill for refinancing.)	XX t-CO ₂ /year
Unallocated proceeds (Invested in short-term financial assets)			JPY ☆☆☆ bill.	

<Example of management of proceeds>



Key points of the Green Bond Guidelines 2017

3. For Practical Use (3)

Providing many concrete examples to help readers consider and visualize approaches

- ✓ Examples of use of proceeds
- ✓ Examples of negative impacts of projects
- ✓ Examples of cases categorized as “refinancing”
- ✓ Examples of criteria for project evaluation and selection
- ✓ Examples of project evaluation and selection processes
- ✓ Examples of tracking management methods for proceeds
- ✓ Examples of information disclosed in reporting
- ✓ Examples of indicators of environmental benefits
- ✓ Examples of calculation methods for environmental benefits
etc.

Outline of the Green Bond Guidelines 2017

(1) Use of proceeds

Concepts in the Green Bond Guidelines	Description in GBP 2017 (Underlined parts indicate revisions made in 2017)
<ul style="list-style-type: none"> ● Proceeds should be allocated to Green Projects that provide clear environmental benefits. 	<p>The cornerstone of a Green Bond is the utilization of the proceeds of the bond for Green projects.</p>
<ul style="list-style-type: none"> ● Issuers should assess the Green Project's environmental benefits and, where feasible, quantification is recommended. 	<p>Environmental benefits will be assessed and, where feasible, quantified by the issuer.</p>
<ul style="list-style-type: none"> ● Issuers should provide investors in advance with information on the use of proceeds through prospectus or other legal documents. 	<p>Should be appropriately described in the legal documentation for the security.</p>
<ul style="list-style-type: none"> ● In the case of use of proceeds for refinancing, it is recommended that the issuer add information to the explanation to the investors on the amount/share of proceeds being used for refinancing and projects* being refinanced. (*Including project description, location, period and schedule) 	<p>In the event that proceeds are used for refinancing, it is recommended that the issuers provide information on the share of refinancing and which project portfolios etc.* may be refinanced. (*Including information relating to "look-back period")</p>
<ul style="list-style-type: none"> ● The issuer should add information on any negative impacts and what the issuers do to curb them to the explanation to investors. 	<p>(No corresponding description)</p>

Outline of the Green Bond Guidelines 2017

(2) Project evaluation and selection process

Concepts in the Green Bond Guidelines	Description in GBP 2017 (Underlined parts indicate revisions made in 2017)
<ul style="list-style-type: none"> ● The issuer should provide investors in advance with information including the following: <ul style="list-style-type: none"> • Environmental sustainability objectives to be achieved through Green Bond issuance^{*1} • Criteria for determining the project's appropriateness in light of the objectives^{*2 and 3} • Process for determination <p>(*1 Including the project's position in the issuer's strategy etc.)</p> <p>(*2 Including standards and certifications used or referred to in evaluation and selection)</p> <p>(*3 There are not only cases that set criteria for appropriateness but cases that set criteria for excluding negative impacts.)</p>	<p>The issuer <u>should clearly communicate</u> to investors:^{*1}</p> <ul style="list-style-type: none"> • the environmental sustainability objectives • the process by which the issuer determines the project's eligibility • the related eligibility criteria^{*2 and 3} <p>(*1: <u>Also, issuers are encouraged to position this information within the context of the issuer's overarching objectives etc.</u>)</p> <p>(*2: <u>Issuers are also encouraged to disclose any green standards or certifications referenced in Project selection.)</u></p> <p>(*3: <u>Including exclusion criteria to identify and manage environmental and social risks</u>)</p>

Outline of the Green Bond Guidelines 2017

(3) Management of proceeds

Concepts in the Green Bond Guidelines	Description in GBP 2017 (Underlined parts indicate revisions made in 2017)
<ul style="list-style-type: none"> ● The issuer should track and manage the net proceeds in an appropriate manner. 	<p>The net proceeds <u>or an amount equal to them</u> should be tracked in an appropriate manner.</p>
<ul style="list-style-type: none"> ● As long as the Green Bond is outstanding, the issuer should periodically adjust to match the amount of the total proceeds to the sum of the amount of proceeds allocated to the Green Project and the amount of the unallocated proceeds. 	<p>As long as the Green Bond is outstanding, the balance of the proceeds should be periodically adjusted to match allocations to eligible Green Projects made during that period.</p>
<ul style="list-style-type: none"> ● The issuer should provide investors in advance with information on how proceeds will be tracked and managed. 	<p>Should be attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations.</p>
<ul style="list-style-type: none"> ● The issuer should provide investors in advance with information on how unallocated proceeds will be managed. 	<p>The issuer should make known to investors the intended types of placement for the balance of unallocated proceeds.</p>

Outline of the Green Bond Guidelines 2017

(4) Reporting

Concepts in the Green Bond Guidelines	Description in GBP 2017 (Underlined parts indicate revisions made in 2017)
<ul style="list-style-type: none"> ● The issuer should publicly disclose the latest information on the use of proceeds. 	
<ul style="list-style-type: none"> ● The disclosure should be made at least once a year until full allocation of the proceeds, and as necessary thereafter in the event of new developments.* (*Including a list of projects, progress of the project, environmental benefits, the amount of the unallocated proceeds and how the unallocated proceeds will be managed.) 	<p>The issuer should make, and keep, readily available up-to-date information on the use of proceeds to be renewed annually until full allocation, and as necessary thereafter in the event of material developments.</p>
<ul style="list-style-type: none"> ● The issuer should use appropriate indicators consistent with the objectives, criteria and characteristics of the project. It is recommended that the issuer, where feasible, use quantitative indicators and disclose information on methodologies and/or assumptions as well as these indicators. 	<p>The GBP recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures in issuers' reporting.</p> <p>The GBP recommend disclosure of the key underlying methodology and/or assumptions used in the quantitative determination.</p>