

Analysis and Recommendations on Green Bond Disclosures in Japan

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Objective

Japan's green bond issuance has mirrored global expansion trends since 2014. Still, Japan lacks the necessary infrastructure to evaluate whether the country's green bond market development will allow it to achieve its Paris Climate Agreement commitment.

We, KSI, hope to help fill this void by analyzing green bond disclosures by considering its impact on stakeholders such as the nation's citizens.

Evaluation Criteria

As KSI we conducted our analysis from the following six perspectives, covering 262 green bond issues (which were issued by the end of June 2021 and reflected in the portal as of the end of September 2021) that are on the domestic issuance list on the Japan's Ministry of the Environment's Green Finance Portal.

Proceed Usage Toward Green Goals	Whether the projects/assets considered for use of the proceeds meet the CBI taxonomy criteria, which are clearly consistent with the scientific rationale for achieving the 2° C goal of the Paris Agreement.
Incremental Environmental Impact of Refinancing	Regarding the projects/assets which proceeds are to be allocated for refinancing, whether the issuer discloses the refinance ratio (amount) and look-back period necessary to assess the additionality of environmental impact (environmental significance additionally generated) based on the environmental benefits of the projects/assets and their remaining lifetime.
Proper Disclosure of Risk Assessment Data	Whether the issuer discloses the information with the results of the risk assessment and the management procedures of any negative environmental or social impacts associated with the relevant projects/assets.
Regular and Consistent Disclosure of Green Performance Indicators	Whether the issuer discloses information to confirm achievement of environmental benefits, and whether the indicators (both qualitative and quantitative) adopted for this purpose are appropriate for measuring the environmental benefits of the projects/assets.
Clearly Defined Data Disclosure Commitments	Whether the issuer itself discloses the framework and other information mentioned above (1 through 4) essential in assessing the greenness of the green bond.
Publishing of Recurring External Reviews	Whether any third-party conducts an external review, which plays an important role in enhancing the reliability of the information disclosed by the issuer.

Data Attributes

Industry Breakdown

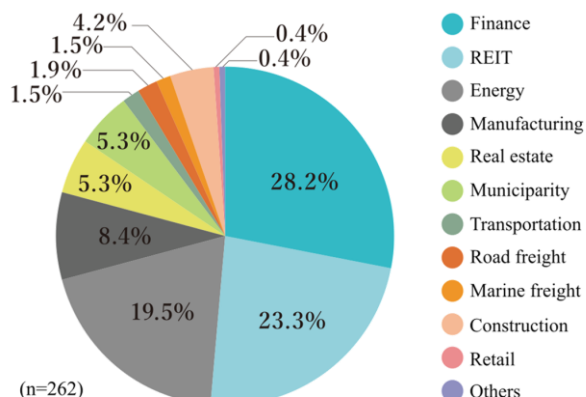
Number of Issues

- Finance(28.2%), REIT(23.3%), and Energy(19.5%) together hold about 70% of the total issuance. The largest issuer is Japan Housing Finance Agency, Nippon Prologis REIT, and Renewable Japan respectively.

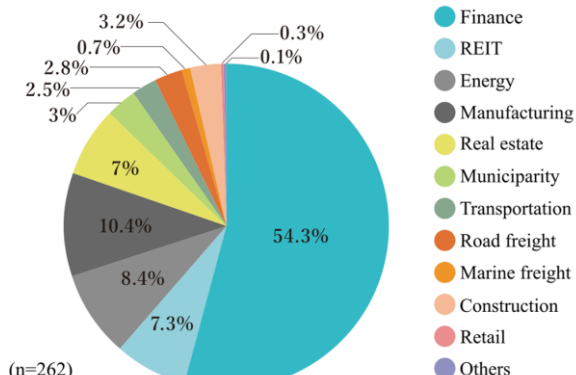
Amount of Issues

- Finance industry leads with 54.2% of the total amount issued. The largest issuer is Japan Housing Finance Agency and it represents 23% of the total amount of the industry.
- Average amount of issue is JPY13bn. That of the finance industry is JPY25.1bn, significantly larger than the others, REIT JPY4 billion and energy JPY 5.5 bn.
- The only issuance above JPY100bn is Japan Housing Finance Agency's government guaranteed bond.

Finance, REIT, and Energy sectors lead the number of issues



Finance sector dominates the amount of issues



(Source) Created by KSI based on the data on the Ministry of the Environment Green Finance Portal. For the foreign currency denominated bonds, exchange rates, USD1=JPY129.86, EUR1=JPY129.86, and AUD1=JPY80.46, of MUFJ TTM as of September 30, 2021 are used for calculation.

Distribution of Amount & Currency

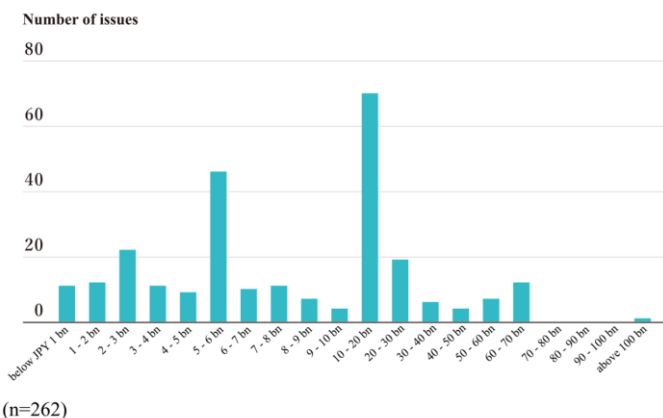
Amount of Issues

- Out of 19 bonds above JPY50bn, 15 is by the financial industry, and 2 each by the real estate and manufacturing industry.
- All the smaller sized deals below JPY1bn are by the energy industry and the use of proceeds is small size renewable energy project. The smallest issuance amount is JPY100m.

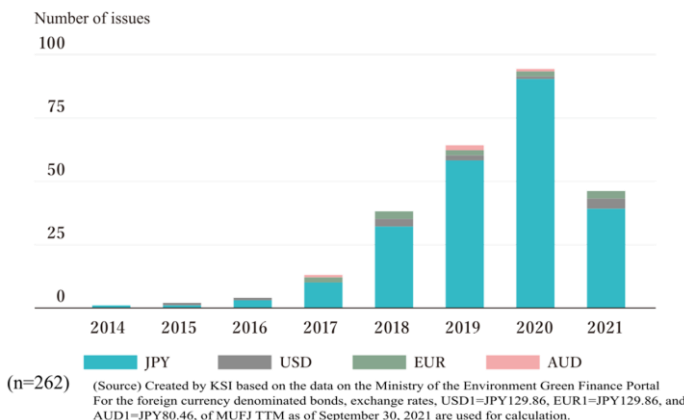
Currency

- Out of 262 bonds, 233(89%) are JPY denominated issuance.
- Foreign currency denominated issuance are made in USD, EUR, and AUD and all of them except Canadian Solar, Central Nippon Expressway Company Ltd., Nidec Corporation, and Tokyo metropolitan government are by the financial industry.

The amount of issues tends to be relatively small



Majority are JPY denominated



Key Findings

Regarding the six perspectives that KSI considers essential for assessing green bond greenness (see “Evaluation Criteria” above), the following are the key points of issues identified through this research.

1. Proceed Usage Toward Green Goals

Summary of analysis results:

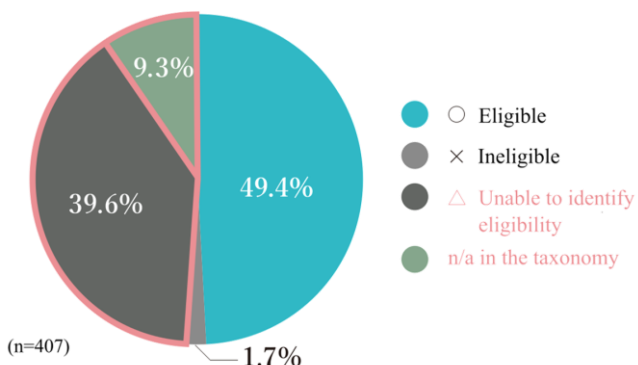
Only approximately 40% of the use of proceeds allocated in green projects/assets were identified to fall into CBI Taxonomy and meet sector-specific eligibility criteria (80% of these projects/assets are for renewable energy generation facilities). In addition, approximately half of the projects/assets could not be identified whether they fall into CBI Taxonomy or not as they don't disclose information consistent with the indicators required in the sector criteria of the CBI Taxonomy. This was particularly remarkable for the green building sector, where all projects/assets could not be identified for their eligibility.

Thus, due to these lack of disclosures required to assess the greenness of the use of proceeds, it is currently difficult to even assess whether the projects/assets into which proceeds are allocated align with the Paris Agreement goal.

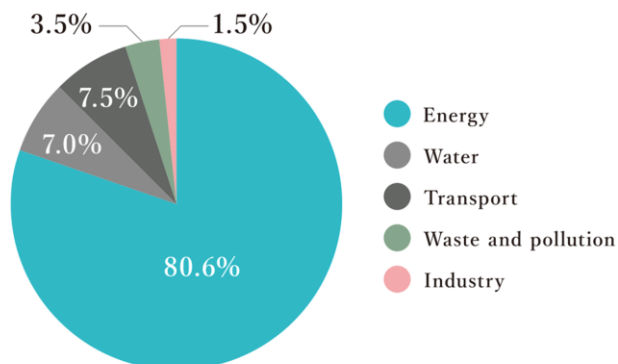
Suggestions:

KSI suggests that issuers should be asked to disclose indicators and data essential for assessing alignment of green bonds with the Paris Agreement goal.

Nearly half of the total projects/ assets cannot be identified for their eligibility due to lack of information



Renewable energy projects account for the largest share in the CBI taxonomy eligibles



2. Incremental Environmental Impact of Refinancing

Summary of analysis results:

For the green project/assets of which proceeds are to be allocated for refinancing, 41% clearly disclosed the estimated refinance ratio (amount) prior to the issuance while the ratio (amount) could not be identified for the remaining of approximately 60% cases. Also, the look-back period was set and disclosed in 42% of the cases prior to the issuance but the figure declines to 21% when it comes to the disclosure of refinancing results after the issuance.

In this research, KSI attempted to examine the additionality of environmental impact (i.e., whether there is any additional environmental significance) of the projects/assets produced by refinancing but failed to do so due to the lack of information as described above.

Suggestions:

Although it is difficult to assess the additionality of environmental impact produced by refinancing solely from information on the refinance ratio (amount) and the look-back period, KSI expects that the issuers disclose the information as a minimum necessary source for assessments.

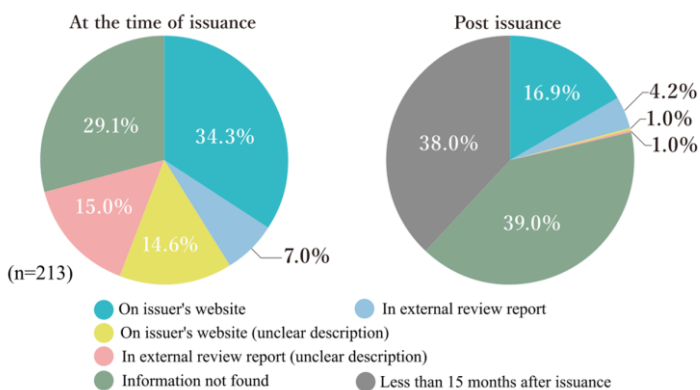
3. Proper Disclosure of Risk Assessment Data

Summary of analysis results:

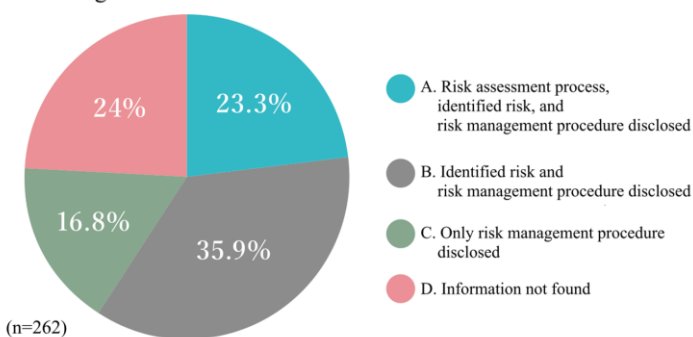
For negative impact, we checked issuers' disclosures of their risk assessment process and the identified risks, as well as how they manage these risks. As a result, only 23.3% of the bonds clearly indicated that risk assessment was conducted and disclosed the identified risks and how they manage these risks. On the other hand, 40.8% of the bonds did not disclose any potential risks, including bonds that only disclose risk management procedures or those without any information related to negative risks. Furthermore, only a limited number of issuers referred to negative impacts in their framework and most of the negative impacts were found in external reviews (either in the SPOs for frameworks or for green bonds).

Also, only a single issuer disclosed its ongoing risk management status including the fact of any negative impact occurred after the issuance of the green bond within the impact report published by the issuer itself.

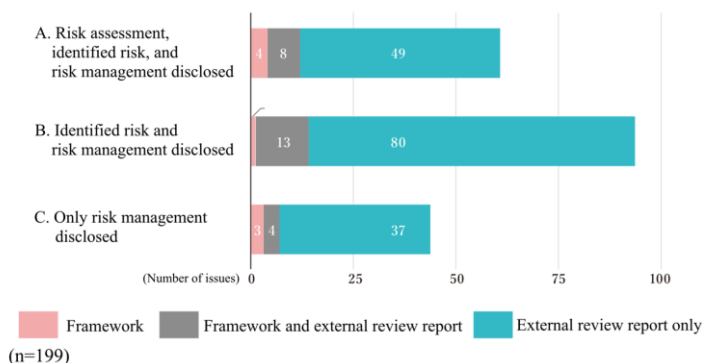
Disclosure of refinance ratio declines after the issuances



Only 23.3% provide full disclosure of negative impact assessments and managements



Negative impact disclosures on issuers' websites are limited



Suggestions:

KSI believes that issuers should explain to investors how they are prepared to deal with negative impacts. We expect the disclosures of negative impacts including how issuers identify and manage risks associated with the relevant projects/assets within the green bond framework will proceed in the future.

Although none of the green bond guidelines require issuers to report on negative impacts after issuance, we believe that the disclosures of the results of periodic risk assessments and how issuers manage environmental and social risks identified play significant roles in avoiding any greenwashing.

4. Regular and Consistent Disclosure of Green Performance Indicators

Summary of analysis results:

Impact reports are indispensable for measuring the environmental benefits provided by the green bonds, and the research found that approximately 70% of the bonds disclosed their impact reports on their websites after issuance. Considering the fact that more than half of the approximately 30% for which impact reports could not be identified included bonds issued within 15 months, the actual disclosure rate of impact reports can be higher.

Most issuers disclose their first impact report within one to one and a half year after the issuance and update them annually, while some reports were not updated after full allocation of proceeds as it is recommended that reporting be disclosed once a year until full allocation by both the ICMA Green Bond Principles and the Green Bond Guidelines of the Ministry of the Environment (hereafter referred to MOE Green Bond Guidelines). Furthermore, as only a limited number of issuers disclose prorated share in each project/asset or total projects/assets, contribution of the green bond proceeds to the environmental performance improvement effect are unclear in most cases. This is especially prominent in the green building sector.

As for the performance indicators, indicators used that are required to be met in the sector criteria or shown as examples in the multiple green bond guidelines or standards were limited, although the tendency differs by sector. This may be an indication that the indicators used are appropriate for showing the progress of the projects but not necessarily appropriate for explaining the environmental benefits provided by the eligible projects. Also, some impact reports fail to specify whether the data disclosed are based on ex-ante or ex-post assessment and there were even cases where multiple uses of proceeds (environmental goals) were listed in the framework but not every impact corresponding to each of the proceeds are reported.

Suggestions:

To avoid greenwashing KSI believes that the environmental impact reporting and disclosure should be disclosed with reliability and on a regular basis even after the full allocation of the proceeds until the bond maturity.

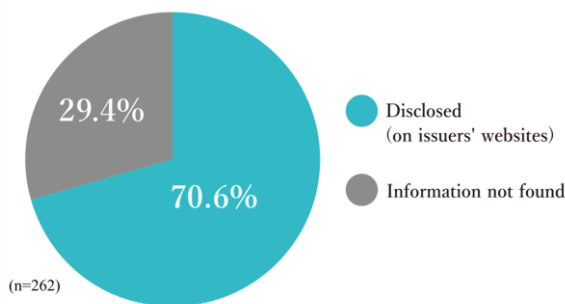
It is important to select and disclose appropriate indicators for projects/assets, including their alignment with the Paris Agreement goal so that investors can accurately assess the environmental benefits provided by assets invested. In addition, we suggest that issuers disclose prorated share in each project/asset or the total projects/assets as well as the actual performance data once the projects are in operation.

5. Clearly Defined Data Disclosure Commitments

Summary of analysis results:

Frameworks include basic information of green bonds and are the fundamental sources for investors' decisions, but we found that only 53% of the bonds disclosed their frameworks on issuers' websites. Among the remainings without framework disclosures on issuers' websites, some disclosures can be found in the external review reports but in some cases none of the information was found in any source.

70% of the bonds disclose impact reports on issuers' websites

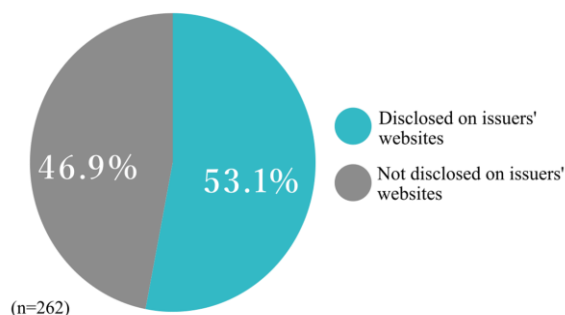


Environmental performance disclosed only at the level of total assets which issuers, SPC or subsidiaries own	
Renewable energy	5
Green building	47
Others (energy efficiency)	1
Total	53

Indicators for renewable energy	
CO2 emissions reduced	54
Renewable energy generation	43
Capacity of renewable energy plant(s)	16
Others (energy reduced, renewable energy usage, etc.)	7

Indicators for green building	
Carbon performance (kgCO2/m ² p.a.)	20
Other carbon performance (Annual CO2 emissions, annual GHG emissions reduced in tCO ₂ -e, etc.)	58
Energy efficiency (kWh/m ² p.a., annual energy used / reduced, etc.)	65
Water efficiency (m ³ /m ² p.a., annual gross water use / reduced, etc.)	51
Waste management (amount p.a. of waste minimised, reduced or recycled in % of total waste and/or in gross amount in tonnes, etc.)	14
Type of scheme, level and numbers of green building certifications (to be) acquired	61
Others (number of serious occupational accidents, amount of renewable energy purchased, etc.)	12

53% disclose the framework on issuers' websites



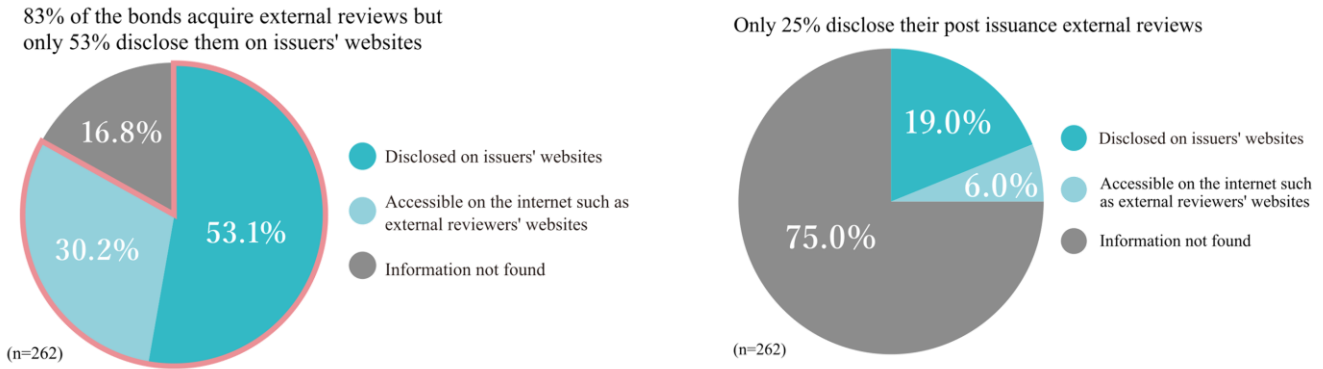
Suggestions:

Although disclosure of the framework is not mentioned in the MOE Green Bond Guidelines, it is defined as the key recommendation for heightened transparency in the ICMA Green Bond Principles and is a fundamental and indispensable source of information in assessing the greenness of a green bond. Thus, KSI suggests that systematic arrangements to encourage disclosures of frameworks including the information mentioned in 1) through 4) above.

6. Publishing of Recurring External Reviews

Summary of analysis results:

While more than 80% of all bonds obtained external reviews prior to the issuance, only 50% disclosed the results on the issuers' websites. Furthermore, the figure declines to 60% when it comes to the acquisition of post-issuance external reviews.



Suggestions:

External reviews play an important role in ensuring the reliability of information disclosed by issuers and KSI expects that issuers use external reviews both before and after the issuance, and that the results be disclosed on the issuers' websites. Moreover, since both pre-issuance and post-issuance external reviews are recommended or mandatory in green bond principles and standards except for the MOE guidelines, we suggest that the MOE include the recommendation in the Green Bond Guidelines.

On the other hand, as there is a question of whether the current external review can ensure its independency, we believe that the roles of investors through their engagements as well as the presence of any third party functioning as watchdog are truly essential in ensuring the disclosure reliability.

Recommendations for Solutions

KSI summarizes its recommendations from the following three perspectives on what it believes is necessary to resolve the issues identified through this research.

1. Enhancement of guidelines and development of disclosure systems

Only In "Key findings and suggestions" above, KSI pointed out what kind of information issuers are expected to include in their green bond disclosures and provided suggestions to ensure their reliability.

Since more than 95% of green bonds issued in Japan refer to the ICMA Green Bond Principles and the MOE's Green Bond Guidelines, KSI believes that enhancing the guidelines will be effective in resolving these issues.

However, simply enhancing the guidelines will not be enough as existing guidelines are not legally binding. The Bank of Japan's climate change operations are expected to lead to an ever-increasing issuance of green bonds but the market growth without any standards nor taxonomy to ensure greenness could pose the risk of greenwashing.

To establish a clear path to carbon neutrality in 2050 and promote sound development of the market, we expect the government to take a leadership in establishing the standards necessary to assess greenness of the green bonds as well as mechanism of promoting and supporting more transparent disclosures by issuers (disclosure of framework, indicators and data aligned with the Paris Agreement goal, etc.).

As the Japanese Financial Services Agency and the Tokyo Stock Exchange have begun considering a framework for certifying the eligibility of ESG-related bonds including green bonds, we expect that the establishment of such mechanisms well reflect the perspectives of heightening "transparency and reliability of disclosures".

Currently, sectors and bonds pointed out in the above analysis as having issues in terms of disclosures and greenness of the use of proceeds are eligible for government subsidies (by MOE). Considering the costs involved in issuing green bonds, the subsidy support will continue to be necessary to attract a wider range of market participants, including venture capitalists and small and medium-sized enterprises (SMEs). Therefore, we expect MOE to set clear screening criteria in selecting green bonds eligible for the grant which rigidly requires disclosure transparency so that they could be demonstrated as the best practices.

2. Encouraging literacy of institutional investors (in defining the investment policies) and promoting engagements

Institutional investors are the most important actors with the ability to make impacts and require issuers to provide

information necessary in making investment decisions on green bonds. As mentioned above, without a mandatory system for green bond disclosures and the absence of third parties responsible for independent monitoring in the Japanese green bond market, KSI believes that institutional investors have an extremely important role to play in the progress of disclosure practices in the market.

We also expect that institutional investors set and clarify their investment policies for green finance, thereby accelerating engagements necessary for making investment decisions in line with their policies, and leading issuers to disclose more information (e.g., the environmental benefits of the projects/assets covered by the green bond, the size of their impact, and their negative impacts if any). This may require the Japanese government to take stronger initiatives to induce institutional investors to do so.

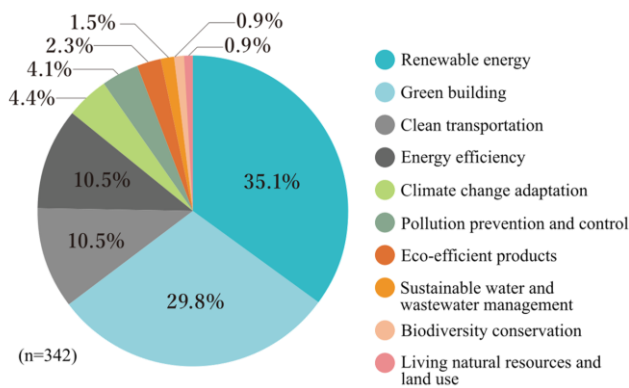
In addition, individual investors are becoming increasingly aware of sustainability and their investment in green bonds are expected to grow in the future. Therefore, we expect issuers and financial institutions to enhance disclosures for such individual investors.

3. The role of a true third party to monitor green bonds

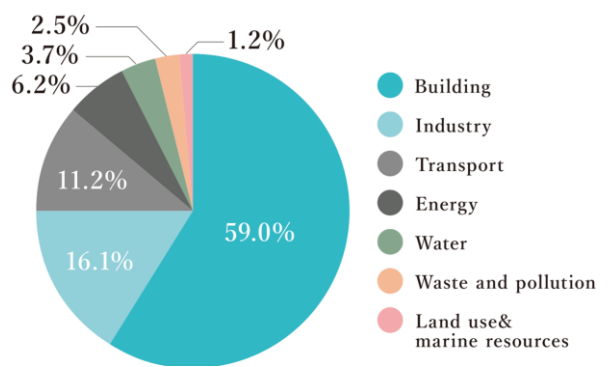
We must be doubtful about the independency of the existing external reviews as the review providers receive direct rewards from the issuers. In overseas, independent third parties, mainly NPOs, play important roles as watchdogs to monitor the sound development of the green bond market including the greenwashing points out. It is necessary to discuss who could play a similar role in Japan (high environmental expertise is mandatory, with perspectives apart from investors, disclosure or certification systems).

Figures :Other Findings of the Analysis

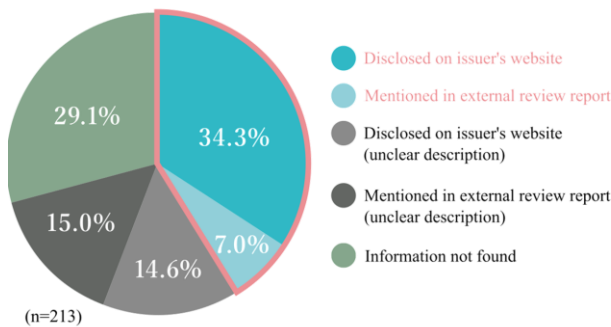
Renewable energy and green building dominate as use of proceeds



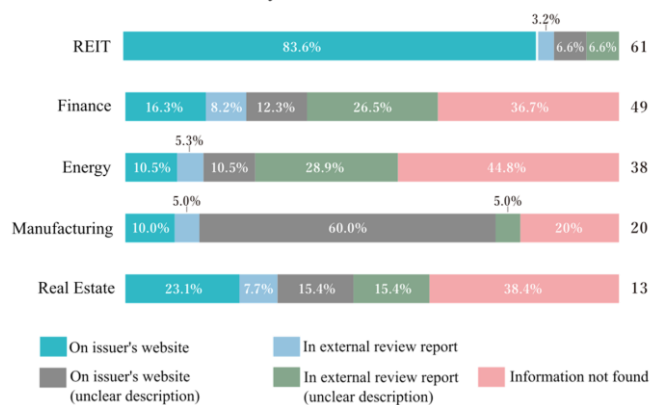
All green building projects/ assets lack disclosures to identify their eligibility



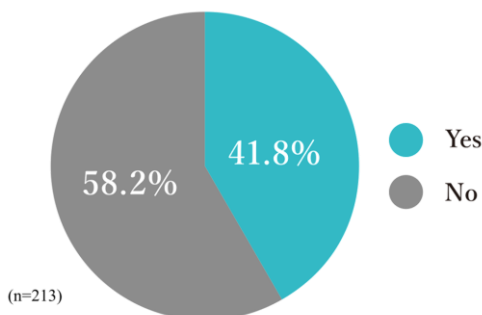
41% disclose refinance ratio



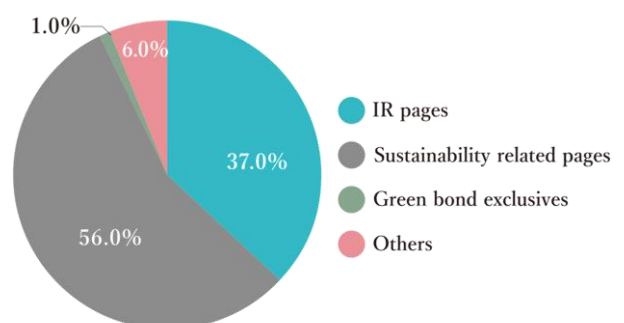
Refinance ratio is mostly disclosed in REIT sector



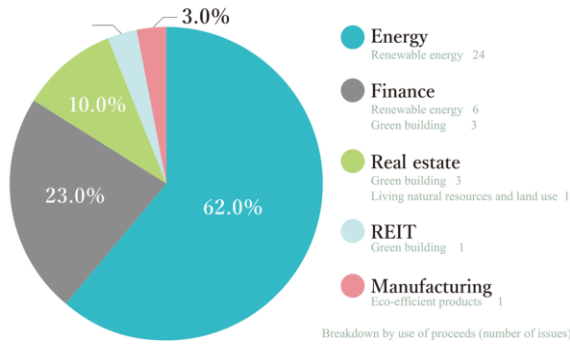
58% disclose lookback period



Impact reports are mostly disclosed on sustainability related pages



Impact reports not found on issuers' websites: breakdown by sectors



Analysis on indicators for environmental benefits: breakdown by the use of proceeds (n=343)

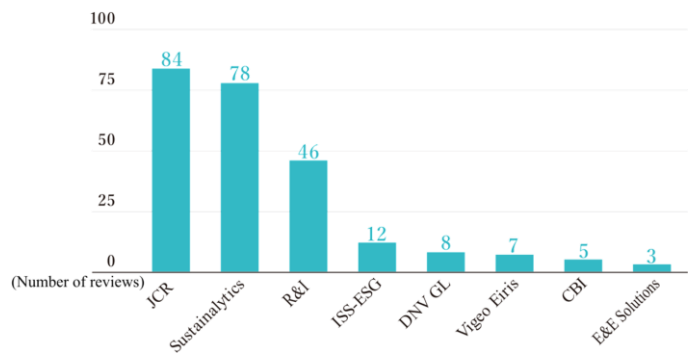
Information not found	100
Disclosed on issuer's website	243
Breakdown	
Renewable energy	69 28%
Green building	80 33%
Clean transportation	28 12%
Energy efficiency	34 14%
Others	32 13%
Climate change adaptation	(12)
Pollution prevention and control	(9)
Eco-efficient products	(4)
Sustainable water and wastewater management	(2)
Biodiversity conservation	(3)
Living natural resources and land use	(2)

Indicators for clean transportations	
Reduction of air pollutants (NOx, SOx, etc.)	14
Number of LNG fueled / fuel supply ship adopted	3
CO2 emissions reduced	14
Others (sales volume of EV motors, etc.)	9

Indicators for energy efficiency	
Number and amount of mortgages	24
CO2 emissions reduced	8
Electricity consumption	5
Others (energy consumption, renewable energy usage, etc.)	4

Indicators for the use of proceeds classified in others	
CO2 emissions reduced	6
Renewable energy generation	3
SOx emissions reduced	3
Distance or number of rivers, seawalls, bridges, etc. maintained	12
Others (volume of environmentally friendly materials used, volume of ballast water treated, etc.)	12

JCR and Sustainalytics have provided more external reviews



Major References (limited to those available in English)

- [Green Bond Guidelines Green Loan and Sustainability Linked Loan Guidelines 2020](#), MOE
- [Climate Bonds Taxonomy](#), CBI, June 2021
- [Climate Bonds Standards Version 3.0](#), CBI, Dec. 2019
- [Green Bond Principles](#), ICMA, June 2021
- [Handbook Harmonised Framework for Impact Reporting](#), ICMA, June 2021
- [Guidelines for Green, Social, Sustainability and Sustainability Linked Bonds External Reviews](#), ICMA, Feb. 2021
- [Technical Report](#), EU TEG on Sustainable Finance, Mar. 2020
- [Taxonomy Report: Technical Annex](#), EU TEG on Sustainable Finance, Mar. 2020
- [Usability Guide EU Green Bond Standard](#), EU TEG on Sustainable Finance, Mar. 2020
- [Green Growth Strategy Through Achieving Carbon Neutrality in 2050](#), METI, June 2021
- [Current Status, Issues and Recommendations on Impact Reporting \(English Summary\)](#), Institute for Global Environmental Strategies (IGES) Finance Taskforce, Oct. 2021
- [Report by the Expert Panel on Sustainable Finance \(Overview\)](#), FSA, June 2021
- [Bank of Japan's Strategy on Climate Change](#), BOJ, July 2021
- [Outline of Transactions for Climate Response Financing Operations](#), BOJ, Nov. 2021
- [Japan Green Finance State of the Market 2020](#), CBI (A. Giorgi, C. Michetti), Mar. 2021
- [Sustainable Global State of the Market 2020](#), CBI (C. Harrison, L. Muething), Apr. 2021



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