

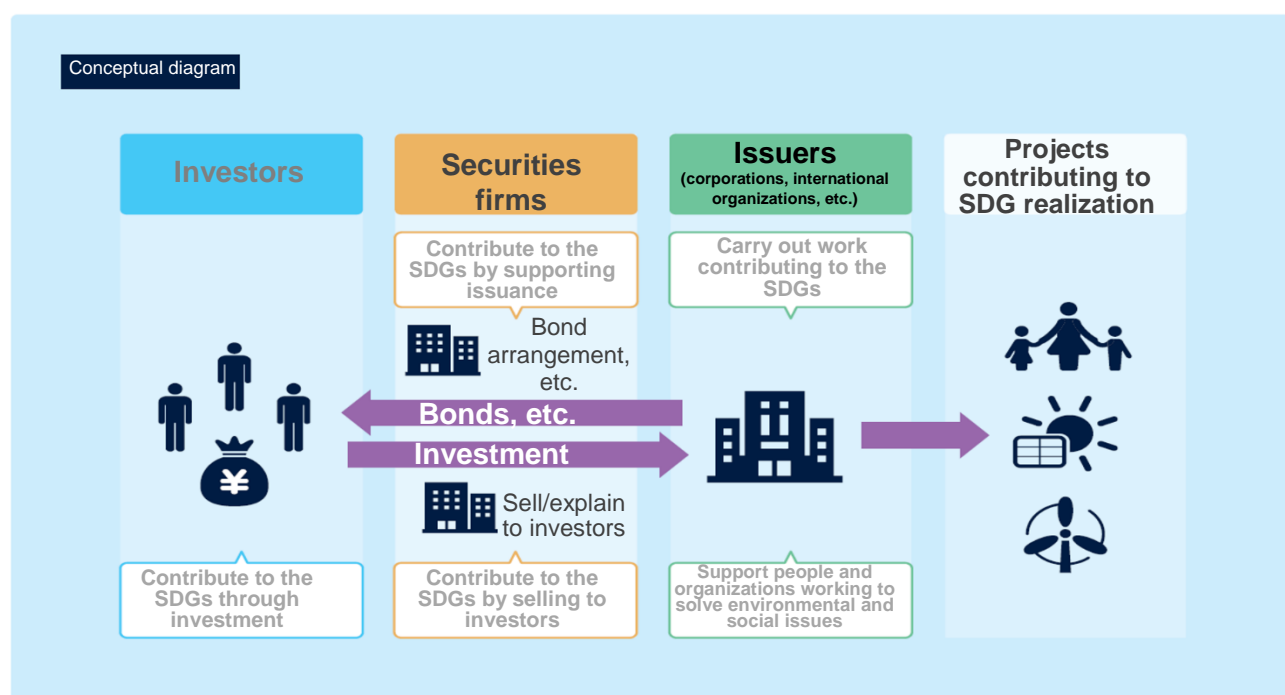
2. SDGs and the Securities Industry: Relationship between the SDGs and Investment, and Functions of the Securities Industry

The SDGs are wide-ranging; various corporations, NPOs, government agencies, and international organizations are involved in projects on behalf of the SDGs, both in Japan and abroad. All of these projects to achieve the SDGs will require enormous amounts of funding, which will need to be supplied not only by the official funds of each country and region but by the private sector as well, including the general public.

The financial instruments handled by securities firms, such as bonds and investment trusts, include those that supply funds to issuers engaged in contributing to the achievement of the SDGs (corporations, countries and regions, government agencies, international organizations, etc.) and support their activities. The funds invested in these financial instruments are used, through their issuers, in projects that contribute to the achievement of the SDGs.

That is, it can be said that investors, by investing in these financial instruments, can at once expect economic return in line with the risks, while at the same time contribute to the realization of the SDGs.

As for securities firms, in exercising the functions of a market intermediary that comprises their main business, they can contribute to the achievement of the SDGs by connecting the funding needs of organizations engaged in contributing to the SDGs (issuers) with the needs of investors wishing to solve environmental and social problems through their investments.

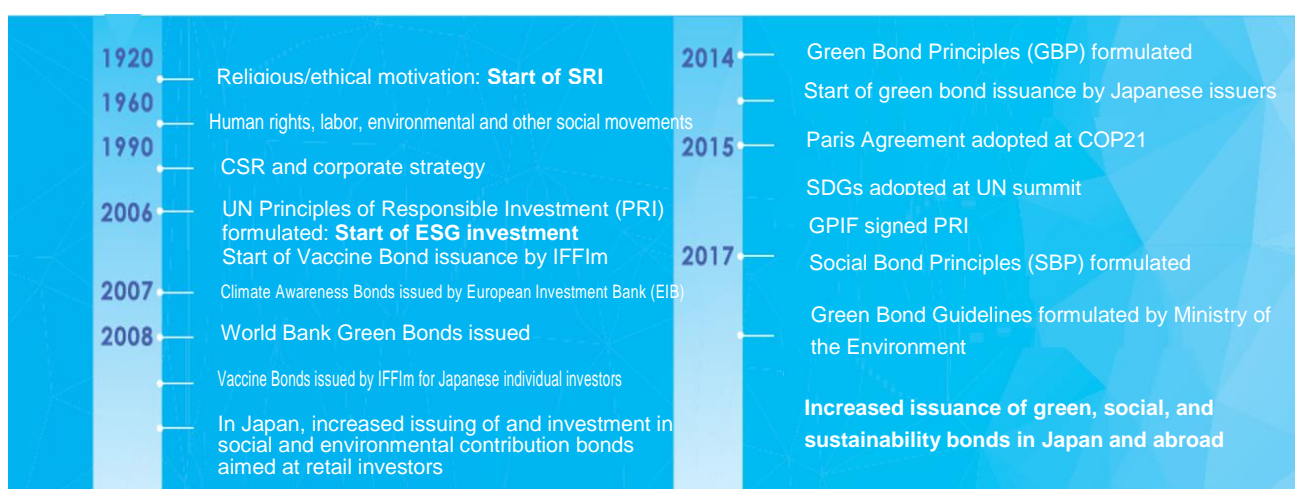


3-1. Overview of Financial Instruments Contributing to SDGs (History, etc.)

Looking closely at the history of financial instruments contributing to the SDGs, one may see that they have undergone a long evolution, tracing back to the 1920s with such concepts as SRI, ESG investment, and impact investment.

In recent years, against the backdrop of worsening resource depletion and climate change due to global warming, even while regulations have tightened, investment opportunities in renewable energy and other new areas have been growing. In this situation, awareness has increased of the idea that in the long term, by affecting sales and costs, responding to environmental and social issues may impact not only investment returns but also corporate sustainability. Along with this, amidst greater public interest such as the drafting of the UN Principles of Responsible Investment (PRI) and adoption of the SDGs, a growing number of investors have come to consider ESG (Environmental, Social and Governance) issues such as climate risk and social responsibilities when making investment decisions. Responding to this trend, issuers (corporations, international organizations, etc.) and financial institutions including securities firms have been expanding issuance and provision of, and disclosure of information related to, financial instruments conscious of ESG and the SDGs.

[Figure: Evolution of Environmentally and Socially Conscious Investment]



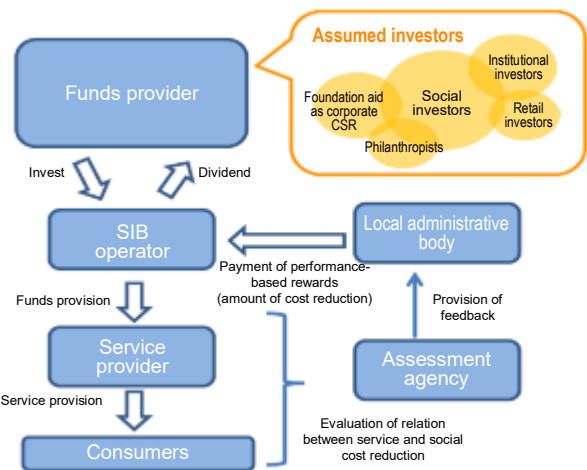
Examples of direct or indirect contribution to the SDGs through financial instruments are many and varied. For instance, in the equity market, there is an investment method called ESG integration, whereby environment, society, and corporate governance (ESG) elements are systematically incorporated in investment decisions and funds are provided to corporations with high overall ratings, encouraging companies to improve their activities. In the case of investment trusts (funds), there are funds that invest in companies conducting business that contributes to the achievement of the SDGs, as well as many funds that select where to invest from the perspective of ESG and the SDGs. These and other examples encourage environmental and social initiatives by companies and their engagement with the SDGs.

<u>SRI:</u>	Socially Responsible Investment. Taking social and ethical standpoints into consideration when choosing where to invest
<u>ESG investment:</u>	A method aimed at properly managing risk and obtaining sustained, long-term return by incorporating ESG (Environment, Social, and Governance) elements in investment decisions
<u>Green bonds:</u>	Bonds issued by companies or international organizations to procure funds used for green projects, helping to solve global warming and other environmental issues
<u>Social bonds:</u>	Bonds issued by companies or international organizations to procure funds used for social projects, helping to solve issues of society in areas such as health, welfare, and education
<u>Sustainability bonds:</u>	Bonds issued to procure funds used in both green and social projects

What are Social Impact Bonds (SIB)?

How do they differ from social bonds?

Social Impact Bonds, which originated in the UK in 2010, are a means of addressing social issues by public-private partnership making use of private sector funds. Local governments and other administrative bodies procure funds from private investors to commission public service projects to private companies or corporate entities, and reward the funds providers based on the social impacts achieved. Although they are called “bonds,” they do not have the features of traditional bonds, and are a different kind of investment method than financial instruments such as social bonds.



[General scheme of SIB] (from the Ministry of Economy, Trade and Industry website)

3-2. SDG Bonds

Among financial instruments contributing to the achievement of the SDGs, the spotlight in recent years has been on so-called “SDG bonds,” which include green bonds, social bonds, and sustainability bonds.

These SDG bonds, whose proceeds go to projects that contribute to the SDGs, include bonds that have a positive impact on the environment and society and align with principles generally recognized as standard (hereinafter, “principles,” for example, the Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines of the International Capital Market Association (ICMA)^{*1}), and bonds issued by institutions whose overall activities are thought to contribute to the SDGs^{*2} and for which information disclosure on their impacts is properly^{*3} carried out.^{*4}

^{*1} In addition to the principles of the ICMA, there are principles formulated by national governments, regions, international organizations, etc. In Japan, the Green Bond Guidelines were announced by the Ministry of the Environment in 2017. Generally, bonds issued in accordance with these principles are called green bonds, social bonds, or sustainability bonds, etc. depending on the principles to which they conform.

^{*2} Institutions whose activities themselves may contribute to the SDGs are likely to be international organizations; for example, the Asian Development Bank, International Bank for Reconstruction and Development (World Bank), European Bank for Reconstruction and Development, Inter-American Development Bank, International Finance Corporation, African Development Bank, European Investment Bank, and Nordic Investment Bank.



^{*3} A possible example is reporting that conforms to the impact reporting indicated in the ICMA principles and elsewhere. It must be noted with caution, however, that there are cases where the activities of the issuing institution are considered as contributing to the SDGs, and information disclosure on the impacts is properly carried out, but the bonds are not issued in accordance with principles.

^{*4} The term “SDG bonds” is used mainly in Japanese domestic markets and is not necessarily common parlance outside of Japan.

While SDG bonds are issued to raise funds to solve environmental and social issues, in terms of repayment of principal and interest, the creditworthiness of SDG bonds in general is similar to that of other ordinary bonds of the issuer. SDG bonds differ from ordinary bonds in that the use of proceeds is specified to be in service of solving environmental and social issues, and the funds for investment collected from multiple investors are supplied directly through financial markets into projects that contribute to the realization of the SDGs.

- In what kinds of projects are the funds invested in SDG bonds used?
Some examples are given in the non-exhaustive list below.

[Figure: Examples of SDG Bond-Funded Projects]

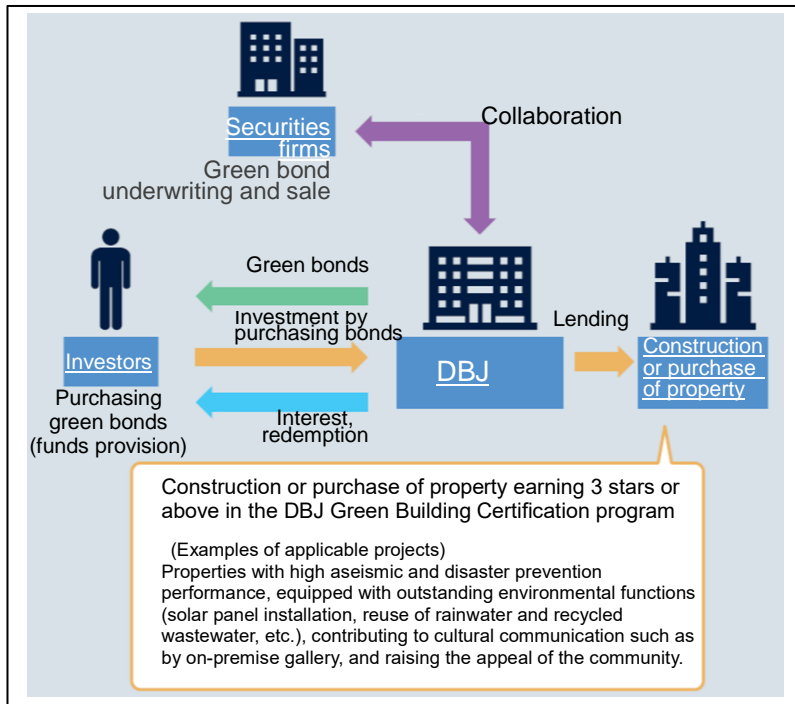
Green Project	Renewable energy						
	Energy efficiency						
	Pollution prevention and control						
	Environmentally sustainable management of living natural resources and land use						
	Terrestrial and aquatic biodiversity conservation						
	Clean transportation						
	Green buildings						
	Sustainable water and wastewater management						
	Climate change adaptation						
Social Project	Eco-efficient and/or circular economy adapted products, production technologies and processes						
	Affordable basic infrastructure						
	Access to essential services						
	Affordable housing						
	Employment generation						
	Food security						
	Socioeconomic advancement and empowerment						

[Case (1)] DBJ Green Bonds

The Development Bank of Japan (DBJ), on the occasion of pollution control measures in the 1960s, began long-term investment and lending for environmental remediation programs. Then, in 2014, to provide opportunities for investing in projects with high environmental and social significance, the DBJ became the first issuer of green bonds in Japan. The proceeds from DBJ Green Bonds are provided as loans for the construction or purchase of buildings that receive high ratings in the DBJ Green Building Certification program, which assesses real estate properties from such perspectives as environmental features, tenant amenities, crime and disaster prevention, community and landscape, and partnership with stakeholders.

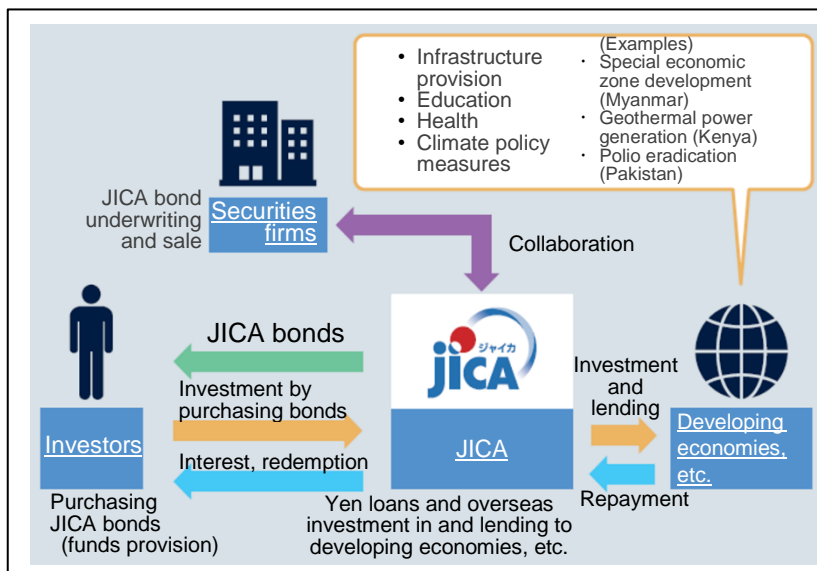
Since 2015, social factors, not just environmental, have been added to the use of proceeds of the aforementioned bonds, and have been issued as DBJ Sustainability Bonds. The newly added category for the use of proceeds includes financing for corporations receiving DBJ Environmentally Rated Loans (added in 2015);

financing of real estate earning a Green Star, which is the top rating on GRESB, the annual benchmark of ESG awareness in the real estate sector; and financing in the renewable energy field or clean transportation-related field (both added in 2017). In such ways, the DBJ is actively supporting a broad range of environmentally and socially conscious initiatives.



[Case (2)] JICA bonds (social bonds)

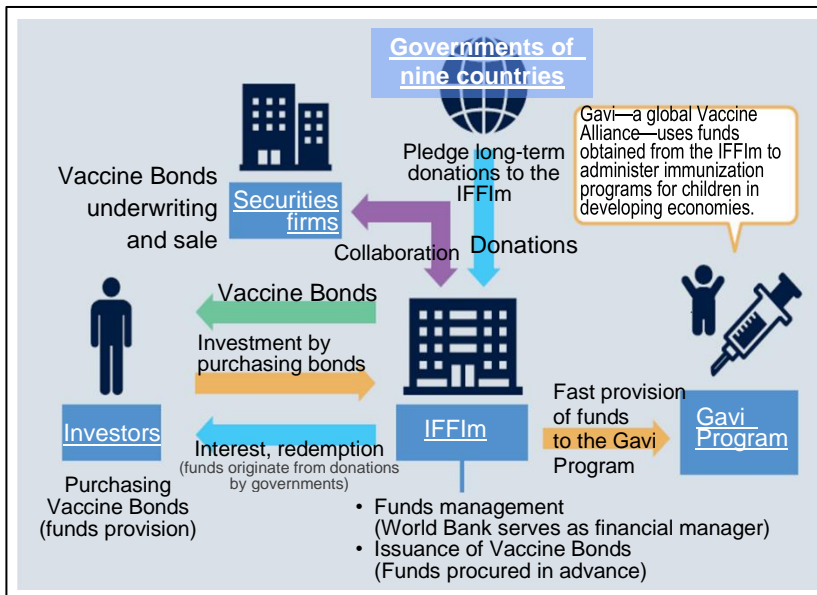
The Japan International Cooperation Agency (JICA) is the agency in charge of administering Japan's Official Development Assistance (ODA), and carries out international cooperation with developing economies, etc. In late December 2016, the Japanese Government issued "The SDGs Implementation Guiding Principles," where "Strengthening the Means and Frameworks of the Implementation of the SDGs" was outlined as one of the eight priority areas, a specific measure for which is to "Mobilize financial resources owned by the private sector in Japan for the benefit of developing economies through the issuance of JICA bonds." The proceeds from JICA bonds go to projects contributing to sustainable economic growth, poverty reduction, climate policy measures, etc. in developing economies based on UN and World Bank criteria.



[Case (3)] Vaccine Bonds

These are bonds issued by the International Finance Facility for Immunisation (IFFIm). The IFFIm issues these bonds to systematically raise funds for inoculation programs conducted by using long-term pledges from donor governments. All the proceeds are used to inoculate children in developing economies.

One reason vaccination programs have been delayed is said to be the lack of funds to pay for the programs. Vaccine Bonds were conceived as a way of procuring large amounts of funds that can be used right away, backed by donations to be provided by governments into the future.



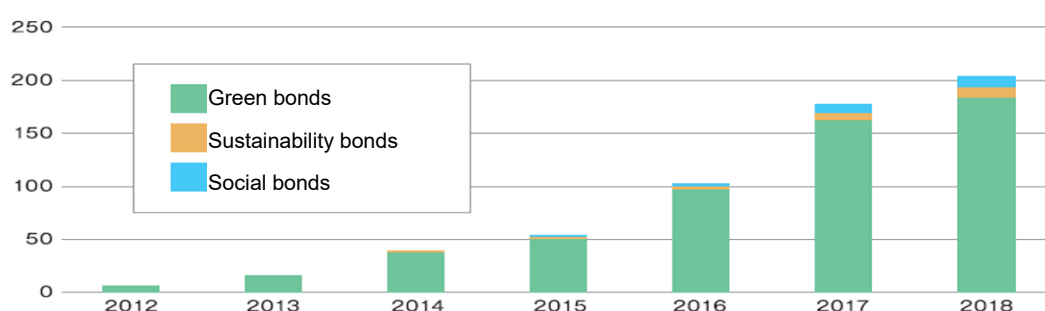
○ To what extent are SDG bonds being issued?

Even before the SDGs were adopted in 2015, bonds with similar benefits as SDG bonds had been issued, tracing as far back as the Vaccine Bonds issued by the International Finance Facility for Immunisation (IFFIm) in 2006. Thereafter, interest grew, surging in Europe and elsewhere with the drafting of the Green Bond Principles in January 2014, so that by 2018 the scale had expanded to more than USD 200 billion (around 22 trillion yen).

In Japan, after Vaccine Bonds began to be sold to retail investors in 2008, such bonds gained traction, chiefly those issued by overseas entities or aimed at retail investors. More recently, awareness has been rising further and their issuance by Japanese corporations and entities has been on an upward trend.*¹

Trend in amounts of green, social, and sustainability bonds issued worldwide

(USD 1 billion)



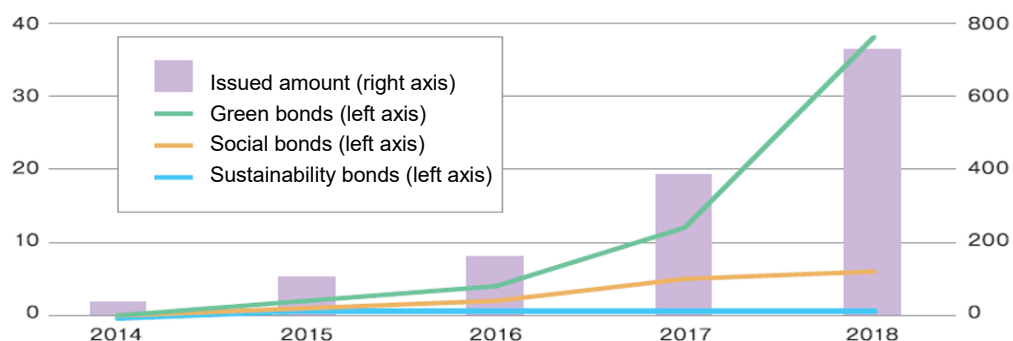
(Source: created by JSDA from Bloomberg data)

*Note that the above indicates the total amounts of green, social, and sustainability bonds based on Bloomberg's standards, and they are not necessarily correspondent with the total amounts of so-called "SDG-bonds".

Trend in SDG bond issuance by Japanese issuers

(Bonds issued)

(1 billion yen)



(Source: prepared by JSDA from data disclosed by issuers on the Green Bond Issuance Promotion Platform of the Ministry of the Environment)

¹For specific issuance cases, see the list of issuers on the website of the Green Bond Issuance Promotion Platform developed by the Ministry of the Environment (<http://greenbondplatform.env.go.jp/en/greenbond/list.html>). A green and social bonds platform is also provided by the Japan Exchange Group (JPX), enabling issuers to post information about green and social bonds from among those listed on the TOKYO PRO-BOND Market (<https://www.jpx.co.jp/english/equities/products/tpbm/green-and-social-bonds/index.html>).

1. What are the Principles of the International Capital Market Association (ICMA)?

These are voluntary guidelines formulated with the International Capital Market Association (ICMA)* serving as Secretariat, which clarify the definitions and principles to be observed by issuers. In particular, the Principles refer to the Green Bond Principles (2014), Social Bond Principles (2017), and Sustainability Bond Guidelines (2017), each of which contain the following four components as their core.

(1) Use of Proceeds

The guidelines state that the proceeds are to be used for green and social projects, which should be appropriately described in the legal documentation for the security. Moreover, all the projects should provide clear environmental or social benefits, which are to be assessed by the issuer.

(2) Process for Project Evaluation and Selection

Regarding the criteria and process for green or social project selection, the guidelines set out matters to be communicated to investors (the environmental sustainability objectives, the process by which the issuer decides the eligibility as green or social projects, and the eligibility criteria).

(3) Management of Proceeds

The guidelines call for managing proceeds in a separate account and ensuring high transparency of management.

(4) Reporting

The guidelines outline the information to be reported regarding the use of proceeds.

Issuers are urged to provide up-to-date information on the use of proceeds until they are fully allocated to green or social projects, and in case of material developments thereafter, to make timely updates on the use of the proceeds.

In measuring the impact of projects, it is recommended that qualitative and, where feasible, quantitative indicators be measured, and that the methodology or assumptions used in the quantitative measurements be disclosed.

It is further recommended that the issuers of bonds confirm the alignment of their bond program with the above four core components by making use of assessment by outside institutions (second-party opinion, verification, certification, scoring/rating).

(ICMA website: <https://www.icmagroup.org/green-social-and-sustainability-bonds>)

2. Green Bond Guidelines of the Ministry of the Environment

These guidelines were formulated in March 2017 by a Review Committee formed by the Ministry of the Environment, which included market participants and experts on the environment. Their objectives are to ensure the credibility of green bond benefits for improvement of the environment, while reducing the costs and administrative burdens for issuers, thereby spurring green bond issuances and investments in Japan.

The guidelines seek to achieve consistency with the globally recognized Green Bond Principles, and to define matters expected of green bonds and specific methodologies. To these ends, there are five components to serve as eligibility indicators: (1) Use of Proceeds, (2) Process for Project Evaluation and Selection, (3) Management of Proceeds, (4) Reporting, and (5) External Review, which are all organized into three levels (“should”, “recommend”, and “to be considered”), in consideration of the needs of clerical staff.

(Green Bond Issuance Promotion Platform of the Ministry of the Environment:
<http://greenbondplatform.env.go.jp/en/policy/japan.html>)

* * *