環境省
Ministry of the Environment

Green Bond and Sustainability Linked Bond Guidelines

Green Loan and Sustainability Linked Loan Guidelines

2024

Green Bond and Sustainability-Linked Bond Guidelines 2024

Green Loan and Sustainability-Linked Loan Guidelines 2024

Established in March 2017
Revised in March 2020
Revised in July 2022 (Annex 1 revised in March 2024)
Revised in November 2024
Ministry of the Environment, Japan

Preface for the Green Bond and Sustainability-Linked Bond Guidelines 2024 and the Green Loan and Sustainability-Linked Loan Guidelines 2024

Entering the next chapter of green finance

The revision of the guidelines, which has undergone a major review of its structure, is expected to be the starting point for the next chapter of the green finance market.

The green finance market, including green bonds, has grown since the International Capital Market Association (ICMA) first published the Green Bond Principles in 2014, following the formulation and revision of principles by international initiatives led by the ICMA, the Loan Market Association (LMA), the Asia Pacific Loan Market Association (APLMA), and the Loan Syndication & Trading Association (LSTA). I would like to pay tribute to the foresight and efforts of these international associations.

Japan has also been working to develop its market since the Ministry of the Environment published its first Green Bond Guidelines in 2017. The guidelines have been updated periodically in response to revisions of the international principles. At that time, although Japan's guidelines were consistent with the international principles, they were uniquely structured and also integrated tailored explanations. This was necessary to introduce advanced global practices to Japan. Further explanation was needed to have better understanding of the market participants in Japan.

However, with this revision, the structure of the guidelines has been changed significantly, with a clear distinction made between the literal translation of the principles and the guidance section for Japanese market participants. The principles section has also been made clearer to show that it is aligned with the international principles. This reflects that Japanese practices have advanced and that Japanese market participants came to be on the same page as global market participants. It can also be said that this shows the end of the initial stage - “creating the market from scratch”.

In revising the guidelines this time, we received many feedback comments from market participants in Japan through a public comment process. We also consulted with ICMA, LMA,

APLMA, which formulate international principles, and the Climate Bonds Initiative (CBI), which has led this field internationally, and received many valuable comments. We would like to thank everyone who provided their input.

The revision of the guidelines, which clarified commonalities with international principles, also shows our intention to continue to move forward in step with the rest of the world. At the same time, we would like to actively communicate and contribute to the revision of international principles from Japan. Furthermore, we need to take green bonds and other forms of green finance to the next chapter.

Although the green finance market has been steadily expanding, the market size is still small in comparison to the overall financial and capital markets. Meanwhile, the challenges we face are growing and becoming more urgent. The effects of climate change are becoming more and more apparent, and the damage is increasing. The government has formulated the Basic Policy for the Realization of Green Transformation (GX), and the issuance of GX economy transition bonds has also begun. It is estimated that 150 trillion yen in investment will be needed over the next 10 years to achieve GX; therefore, the mobilization of private-sector funds continues to be a challenge. Since the promotion of GX involves a shift in industrial structure and has a significant impact on local communities, consideration for a “just transition” is also essential. The crisis of ecosystems and biodiversity is also an urgent issue, and the government has announced the Transition Strategies toward Nature Positive Economy.

In the future, green finance will be required to make a full-fledged contribution to addressing these issues. This means further expansion of the market and an increase in its real impact. When such mechanisms truly take root, the way we view capitalism will also change.

Green bonds and green loans commit to using the funds raised for green projects, while sustainability-linked bonds and sustainability-linked loans commit to achieving certain sustainability performance targets. Investors and financial institutions also take these commitments into account when making investment and financing decisions, and then monitor and sometimes provide support. This means that both the providers and recipients of funds impose self-discipline on themselves, and incorporate a mechanism that drives society to a sustainable future into the capital market function. When such practices become widespread and truly take root, green finance will go beyond being a financial product and may show a new

form of economic system.

I hope that many market participants will begin to move towards such a future.

November 2024

Study Group on Green Finance

Chair: Takeshi Mizuguchi

List of Members of the Green Finance Committee in 2024

*Title is as of September 10, 2024, when the eleventh Committee was held.

Chairperson	Takeshi Mizuguchi	President, Takasaki City University of Economics
Committee member	Kazuyuki Aihara	Head of Sustainable Finance products, Sustainable Business Development Dept., Nomura Securities Co., Ltd.
Committee member	Eiichiro Adachi	Senior Counselor, The Japan Research Institute, Limited
Committee member	Masaaki Iwabuchi	General Manager, Finance & Investment Planning Department, Nippon Life Insurance Company
Committee member	Takahiro Ueno	Senior Researcher & R&D Manager (Sustainability), Socio-Economic Research Center, Central Research Institute of Electric Power Industry
Committee member	Shunsuke Oshida	Managing Director, Head of Credit Research, Japan. Manulife Investment Management (Japan) Limited
Committee member	Kiyomi Kasai	Deputy Director, Environment & Energy Policy Bureau Keidanren (Japan Business Federation), Keidanren Japan Business Federation
Committee member	Atsuko Kajiwara	Managing Executive Officer, Head of Sustainable Finance Evaluation Group, Japan Credit Rating Agency
Committee member	Masato Kanedome	Sustainability Service Department, Principal, DNV Business Assurance Japan
Committee member	Arisa Kishigami	Board member, Japan Sustainable Investment Forum (JSIF) Specialist, Sustainable Investment, Chonos Sustainability Ltd.
Committee member	Kuzubata Astushi	Deputy General Manager, Sustainable Solution Department, Development Bank of Japan
Committee member	Yoshio Shima	Visiting Professor, LEC Graduate School of Accounting
Committee member	Ryosuke Tamura	Managing Director, General Manager of ESG Finance & Product Innovation Division Investment Banking Business Unit Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
Committee member	Mana Nakazora	Vice Chairperson of Global Market, Japan BNP Paribas Securities (Japan) Ltd
Committee member	Reiko Hayashi	Director and Deputy President, BofA Securities Japan, Co., Ltd.
Committee member	Yuko Hirano	General Manager, Sustainable Products Promotion Department, Mizuho Financial Group, Inc.

Observer	Financial Services Agency, Ministry of Economy, Trade and Industry, Bank of Japan
	The Life Insurance Association of Japan, Japanese Bankers Association, Japan Investment Advisors Association, Japan Exchange Group, The Japanese Institute of Certified Public Association, Japan Securities Dealers Association
Secretariat	Environment and Economy Division, Minister's Secretariat, the Ministry of the Environment, Japan
	The Japan Research Institute

List of Members of the Green Finance Committee in 2023

*Title is as of March 19, 2024, when the tenth Committee was held.

Chairperson	Takeshi Mizuguchi	President, Takasaki City University of Economics
Committee member	Kazuyuki Aihara	Head of Sustainable Finance products, Sustainable Business Development Dept., Nomura Securities Co., Ltd.
Committee member	Eiichiro Adachi	Senior Counselor, The Japan Research Institute, Limited
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Green Bond and Sustainability-Linked Bond Guidelines 2024

Established in March 2017

Revised in March 2020

Revised in July 2022

Revised in July 2022 (Annex 1 revised in March 2024)

Revised in November 2024

Ministry of the Environment, Japan

Disclaimer

The Green Bond Guidelines (hereinafter “the Guidelines”) are legally non-binding and no legal penalties will be imposed even if a certain action does not comply with the elements (including elements described with the word “should”) described in the Guidelines. However, it is necessary to note that if a certain action violates any laws or regulations, legal penalties may be imposed based on said laws or regulations, even though the action complies with the elements described in the Guidelines.

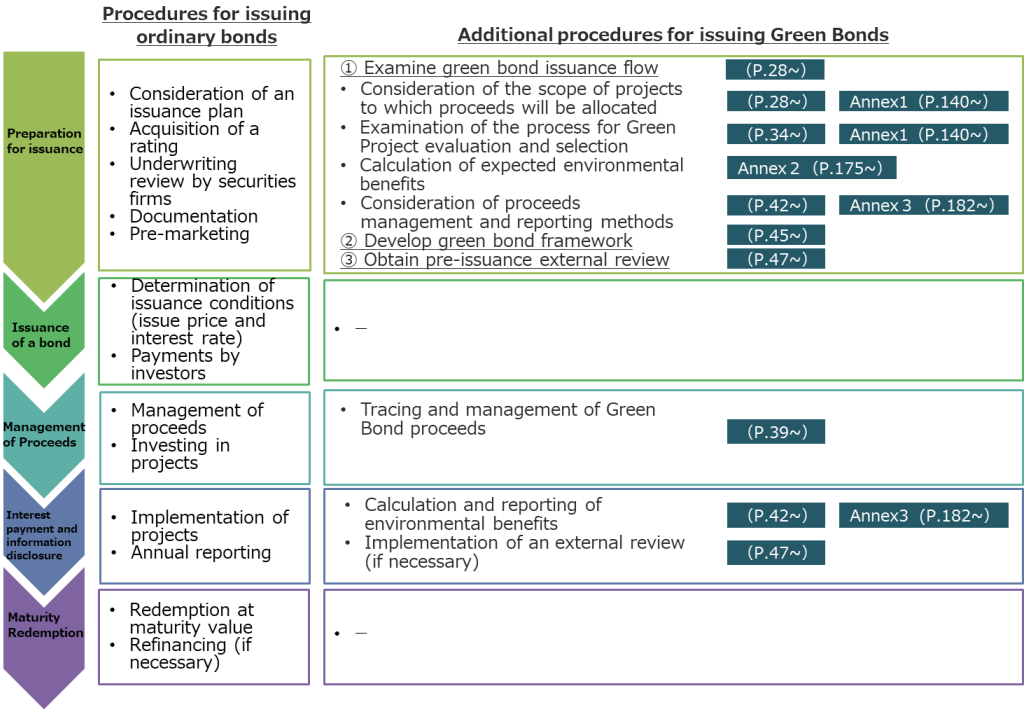
The Guidelines do not constitute advice on decisions regarding investments in specific Green Bonds, other securities, or financial matters, or recommendations to purchase, sell, or hold specific Green Bonds or other securities.

The Guidelines do not guarantee that the projects to which proceeds from specific Green Bonds, etc. are allocated will produce the intended environmental benefits, and assume no responsibility whether the projects realise their environmental benefits or not.

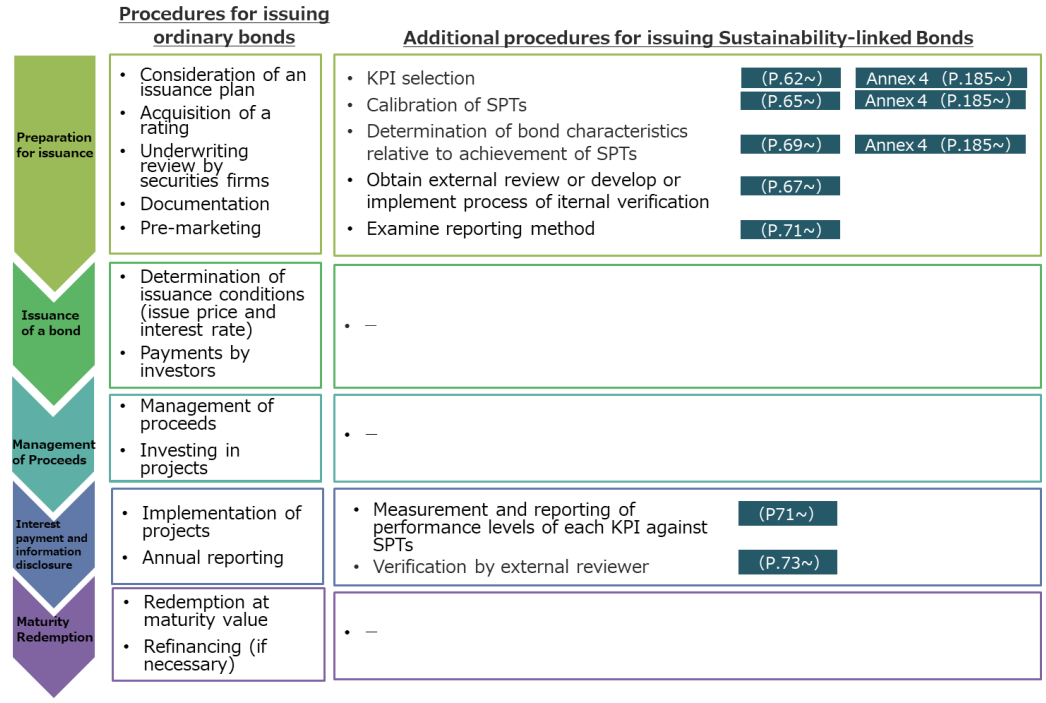
Those who issue, purchase, sell, or hold specific Green Bonds or other securities shall do so at their own risk.

The Ministry of the Environment, Japan will not be liable in any way for any loss, damage, or expense of any kind incurred as a result of, or in connection with, the use of the information presented in the Guidelines, and/or caused by any modifications or the abolition of the Guidelines.

Issuance flow of Green Bond and Sustainability-Linked Bond



*The page numbers in the figure refer to the relevant sections of these guidelines.



*The page numbers in the figure refer to the relevant sections of these guidelines.

Chapter 1 Introduction

1. Purpose of the Guidelines

At COP28 in Dubai, UAE, in November 2023, a global stocktake was held for the first time, emphasising the need for urgent action to achieve the 1.5°C goal in the Paris Agreement, and recognising the need to peak global emissions by 2025. For a substantial early reduction in greenhouse gas (GHG) emissions and structural changes towards a decarbonised economy and society, it is necessary to mobilize large amounts of private investments towards Green Projects, such as renewable energy projects.

During COP26 in 2021, GFANZ[1], a global coalition of financial institutions aiming to achieve net zero, was officially established and its Japan Chapter was established in May 2023 to support the decarbonisation needed to achieve Nationally Determined Contributions (NDCs). In addition, there has been further acceleration of the global movements from the financial side to encourage companies to decarbonise; for instance in June 2023, the International Sustainability Standards Board (ISSB) published the first global sustainability disclosure standard, including climate change.

In addition, heavy rainfall events have become more frequent in recent years, with climate change identified as a contributing factor in weather-related disasters that have caused significant damages. As global warming intensifies, it is predicted that the frequency and intensity of extreme events such as heavy rainfall will increase and that the impacts will increase in various sectors such as agriculture, forestry, fisheries, and health. In parallel to this, the importance of adaptation projects that avoid or mitigate the risks of climate change. At the same time, the G7 Hiroshima Leaders' Communiqué and G7 Sapporo Climate, Energy and Environment Ministers' Communiqué state that in the face of the triple global crisis of climate change, biodiversity loss and pollution, we will work together to achieve transformation of our economies to enable net zero (decarbonisation), circular, pollution-free, and nature positive and commit to leveraging synergies, recognising the interdependence of issues. It is essential to address, along with climate change, conservation of biodiversity, prevention of air and marine pollution, and resource recycling including measures against plastic waste, as the interlinkage between climate change and biodiversity loss. The role of private capital is also important for integrated initiatives in

[1] Glasgow Financial Alliance for Net Zero

these fields.

In addition to the sustainable finance frameworks such as TCFD[2], which has taken the lead on decarbonisation, the Taskforce on Nature-related Financial Disclosures (TNFD) was launched in 2021 and a disclosure framework was published in September 2023. Not only business entities but also investors and financial institutions came to regard the sustainable use of natural capital as an element of business, as all business activities of companies affect and depend on natural capital.

Japan has pledged to become carbon neutral by 2050, and has set an ambitious target aligned with the 2050 goal: a 46% reduction in GHG emissions by 2030 from 2013 levels, while striving for a 50% reduction. To achieve these goals, not only the transformation in the energy distribution structure but also bold actions across local communities, lifestyles, and industrial structures are necessary. In particular, in order to accelerate decarbonisation in regions towards carbon neutrality, the Decarbonisation Leading Areas have been selected to simultaneously achieve carbon neutrality and solve regional issues by 2030, without waiting for 2050. In addition, in October 2022, Japan Green Investment Corp. for Carbon Neutrality (JICN) was established to provide investment and financing (risk money supply) to attract various projects that contribute to decarbonisation. In this way, it is also important to strengthen financial flow for decarbonisation in both the public and private sectors. Furthermore, responding to climate change is deeply interlinked with challenges across various fields, including natural disasters, natural ecosystems, health, agriculture, forestry and fisheries, industry and economic activities. Therefore, Japan needs to holistically approach its aim to achieve carbon neutrality by 2050, as well as its aim to realise a sustainable economy and society in a broader sense, and drive investments into these initiatives.

Under such circumstances, the issuance of Green Bonds, bonds[3] issued by corporations and local governments to raise funds for Green Projects, and investment in these bonds have expanded both inside and outside of Japan. Green Bonds are becoming one of the effective tools to drive private funds for Green Projects, including ones that contribute to the reduction of GHG emissions and the prevention of natural capital deterioration. This trend became evident after the “Green Bond Principles[4]” (hereinafter referred to as “GBP”)

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[2] Task force on Climate-related Financial Disclosures

[3] “Green Bonds” not only include bonds but also securitised bonds described in 1 under Section 1 of Chapter 2.

[4] ICMA, Green Bond Principles (June 2021), https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/
Green Bond Principles (GBP) are published by the International Capital Market Association (ICMA) for voluntary frameworks and commonly recognised as international standards on issuance of Green Bonds. Following the June 2021 revision of the GBP, the Appendix was updated in June 2022, and a new supplemental Pre-issuance Checklist was published.

were formulated in January 2014. In Japan, after establishing these Guidelines for the first time in 2017, bond issuance expanded rapidly, with the amount of bonds issued by domestic entities exceeding 3 trillion yen in 2023. However, while the issuance of Green Bonds in Japan is on upward trend, it is still in its developing stage compared to other countries, and also insufficient given the need to introduce large amounts of private funds to achieve the afore-mentioned international goals. At the same time, as the global Green Bond market continues to expand, there has been rising concerns about "green wash" (proclaiming to be "green" despite having no environmental benefits or not allocating proceeds[5] appropriately to eligible Green Projects) and the requirement from the market has increased, taking into account the overall environmental performance and sustainability/ESG strategies of the issuer when assessing Green Bonds. Accordingly, it is essential to ensure the credibility of Green Bonds for further expansion of the market.

In addition, the Sustainability-Linked Bond Principles[6] (hereinafter referred to as "SLBP") were published in June 2020. Sustainability-Linked Bonds allow the funds raised to be used for general purposes and encourage companies to enhance their sustainability management by achieving ambitious targets (SPTs: Sustainability Performance Targets). Such instruments can also be effective tools for mobilising private funds in this field, as they increase incentives to achieve targets and enhance sustainability management through dialogue with investors. Also, while Sustainability-Linked Bonds have the significant advantage of enabling companies to show the direction of their sustainability business strategies as they encourage companies to enhance their sustainability management through achieving SPTs, there are some arguments whether green eligibility is sufficiently secured. Therefore, it is expected that appropriate disclosure will be made in accordance with the Guidelines.

Considering the above, the purpose of the Guidelines is to expand the Green Bond market and the Sustainability-Linked Bond market in Japan in a sound and proper manner. In the meantime, the Guidelines provide market transparency as well as clarification on green eligibility reflecting international trends, in order to address the concerns around greenwashing and secure credibility of Green Bonds.

Moreover, the Guidelines align with the GBP and SLBP, which are widely accepted in international Green Bond and Sustainability-Linked Bond markets, and provide issuers, investors, and other market participants with illustrative examples of specific approaches

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[5] "Proceeds" in the Guidelines means the "net proceeds" after issuance fees of the Green Bonds have been deducted.

[6] ICMA, Sustainability-Linked Bond Principles (June 2024)
https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/
Sustainability-Linked Bond Principles are published by the International Capital Market Association (ICMA) for voluntary frameworks and commonly recognised as international standards on issuance of Sustainability-Linked Bonds. Following the development of the SLBP in June 2020, a registry of KPIs was released as a new supplement in June 2022.

and interpretations tailored to the Japanese market for their reference in decision-making regarding Green Bonds and Sustainability-Linked Bonds. The Guidelines aim to establish the credibility of the Green Bonds' impact on improving the environment as well as alleviate the costs and administrative burdens for issuers, thereby spurring sound and proper expansion of the Green Bond and Sustainability-Linked Bond markets in Japan.

It should be noted that the Guidelines are not legally binding and thus no legal penalties will be imposed if a certain action does not comply with the elements described in the Guidelines (including elements described with the word "should"). However, it is necessary to note that, if a certain action violates any laws and regulations, legal penalties may be imposed.

Furthermore, the Guidelines were first developed as the Green Bond Guidelines in 2017 and revised three times in 2020, 2022 and 2024, in light of revisions to the international principles as well as market and domestic policy trends. Thus it is recommended to make sure to refer to the latest version.

For reference, examples of green bond and other issuances, the latest trends and other related measures are available on the Green Finance Portal.
(https://greenfinanceportal.env.go.jp/en/)

2. Basic Concepts of the Guidelines

(1) Green Bonds

The Green Bond market is to be developed through interactions based on sufficient information between issuers clearly declaring that they will allocate the proceeds only to Green Projects, and investors who want to invest in Green Projects of their choice. The final decision on how to evaluate the appropriateness of the issuer's approach to Green Bonds, and whether or not to target Green Bonds for investment, is left to the market.

It is helpful to organize the expected elements of Green Bonds in the Guidelines to form the foundation for interactions between issuers and investors and serve as a tool for assuring stakeholders that the finance/investment is for Green Projects.

Additionally, it is important for both issuers and investors that the credibility of the green eligibility of Green Bonds is maintained within the market and society. In particular, preventing greenwashing in the market is imperative for the protection of Green Bond investors.

Based on the above, the Guidelines have been developed in alignment with the internationally accepted GBP (as of June 2022). The Guidelines recognise that a Green Bond that align with its four components: (1) Use of Proceeds, (2) Process for Project Evaluation

and Selection, (3) Management of Proceeds, and (4) Reporting, all of which are described with the word "should" in Chapter 2 of the Guidelines, can be internationally accepted as Green Bonds[7]. In addition, addressing the two Key Recommendations in the Guidelines: (1) Green Bond Frameworks, and (2) External Reviews (also described with the word "should") would also contribute to improving the transparency of Green Bonds, which the ICMA Green Bond Principles emphasise.

(2) Sustainability-Linked Bonds

Like the Green Bond market described above, the Sustainability-Linked Bond market is also to be developed through interactions based on sufficient information between issuers and investors. In terms of how to evaluate whether the issuer's approach to the Sustainability-Linked Bonds is appropriate, and whether a Sustainability-Linked Bond will be selected as a target for investment, the final decision is left to the market.

The Guidelines have been developed in alignment with the SLBP (June 2024), and, in particular, recognise that a Sustainability-Linked Bond is expected to align with five components: (1) Selection of Key Performance Indicators (KPIs), (2) Calibration of Sustainability Performance Targets (SPTs), (3) Bond characteristics, (4) Reporting, and (5) Verification. Bonds that address all of these components described with the word "should" in Chapter 3 of the Guidelines can be internationally accepted as Sustainability-Linked Bonds.

(3) Common items

As for the items whose interpretation varies among issuers, investors, and other market participants, it is important to establish a mechanism whereby the issuers disclose how they address them and investors or other market participants evaluate its appropriateness, except for responses that are clearly inappropriate, rather than uniformly excluding them, and the market participants accumulate and make the most of knowledge. This mechanism will improve market discipline to prevent the risk of greenwashing while ensuring the diversity of issuers' approaches to each item.

On an international basis, various countries and jurisdictions try to classify environmentally-sustainable economic activities in order to identify eligible recipients of investments and loans in sustainable finance[8]. The Guidelines have the same objectives, in a

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[7] However, it is necessary to keep in mind that an individual Green Bond is to be evaluated and selected by each investor and other related participants based on their own ways of thinking.

[8] In the EU, taxonomy rules have been established to clarify whether economic activities are environmentally sustainable etc. and have already been implemented in the two areas of climate change mitigation and adaptation. In the areas of climate change mitigation and others, the Climate Bond Initiative, an international NGO in the United Kingdom, has also formulated taxonomies.

sense that it clarifies and provides in Annex 1 the guidance on the definition of environmental aspects, i.e., green eligibility, as a reference for assessment in the market.

With regard to the use of proceeds of Green Bonds in Japan, it is also important to continue to take necessary measures, monitoring the international collaborative efforts and improving international comparability and interoperability.

These Guidelines focus on the green eligibility of Green Bonds (including the green characteristics of Sustainability Bonds which include Green Projects in their use of proceeds) and the sustainability of Sustainability-Linked Bonds, and therefore do not cover their characteristics and risks as bonds. It is important to note that Green Bonds and Sustainability-Linked Bonds, even if aligned with the Guidelines, have credit risks, price fluctuation risks, liquidity risks, and other risks, like ordinary bonds. Likewise, it is important to make sure that Green Projects do not have significant negative impact on the society.

3. Relations with Related Financial Approaches and Instruments

Financial approaches and instruments related to Green Bonds and Sustainability-Linked Bonds include Climate Transition Finance and Sustainability Bonds as shown below. They are not mutually exclusive, and issuers should determine the label based on their business strategy, finance strategy and/or sustainability/ESG strategy, and conditions in the market. The combination of these financial approaches and instruments can contribute to stabilizing and diversifying corporate funding as well as delivering a clear message to the market.

(i) Climate transition finance

Climate transition finance is a financial approach to support GHG emissions reduction initiatives of companies that take action to reduce emissions based on their long-term strategies for transition to a decarbonised society[9]. This finance approach is for the companies that committed to ambitious efforts for their future as they are required to have explicit strategies to achieve long-term goals consistent with the Paris Agreement. Climate transition finance is therefore an important tool for realising a decarbonised society.

At the same time, climate transition finance is determined holistically – not just by the use of proceeds or the KPIs but rather by the credibility of the issuer's climate transition strategy and execution. Issuers can label their bonds as climate transition finance when the bonds

[9] See the "Basic Guidelines on Climate Transition Finance" by the Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment, Japan. https://www.meti.go.jp/press/2021/05/20210507001/20210507001-3.pdf

meet the four key elements[10] of climate transition finance as well as the criteria for Green Bonds or Sustainability-Linked Bonds set forth in the Guidelines for issuance processes.

As mentioned above, the choice of the label should be determined by the issuer based on their own business strategy, finance strategy, and/or sustainability/ESG strategy in the market. Meanwhile, issuers can choose to label their bonds as climate transition finance for climate change mitigation projects by referencing the four key elements of Climate Transition Finance, in case they disclose their climate transition strategies in line with Paris Agreement.

(ii) Sustainability Bonds

Sustainability Bonds are defined by the use of proceeds limited to finance or refinance of Green and Social Projects, and by the alignment with the four core components of the GBP (or these Guidelines) and/or Social Bond Principles (SBP)[11] (or the Social Bond Guidelines published by the Financial Services Agency[12]).

The issuance of Sustainability Bonds has grown internationally since the establishment of the Sustainability Bond Guidelines in 2017[13]. Sustainability Bonds, which include Green Projects in the use of proceeds, offer the same benefits as Green Bonds and are an effective tool to introduce private funds into Green Projects.

While these Guidelines set out expected elements and other issues with a focus on the green characteristics of Green Bonds, they also apply to the green characteristics of Sustainability Bonds. Accordingly, the components in Section 2 of Chapter 2 shall also apply to Sustainability Bonds that have green characteristics, by replacing the term "Green Bonds" with the term "Sustainability Bonds".

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[10] In the "Climate Transition Finance Handbook" and the "Basic Guidelines on Climate Transition Finance," four elements (Element 1: Issuer's climate transition strategy and governance; Element 2: Business model environmental materiality; Element 3: Climate transition strategy and targets to be science-based; Element 4: Implementation transparency) are recommended to be disclosed by the issuer.

[11] ICMA Social Bond Principles (June 2022)
https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Social-Bond-Principles-June-2021-140621.pdf
The Social Bond Principles are voluntary guidelines for social bond issuance established by the International Capital Markets Association (ICMA) and are generally recognised as the international standard for social bonds.

[12] The Financial Services Agency published the Social Bond Guidelines, in accordance with the Social Bond Principles of the ICMA.
The Social Bond Guidelines (October 2021)
https://www.fsa.go.jp/news/r3/singi/20211026-2/02.pdf

[13] ICMA Sustainability Bond Guidelines (June 2021)
https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Sustainability-Bond-Guidelines-June-2021-140621.pdf

4. Structure of the Guidelines

Section 1 of Chapter 2 provides an overview of Green Bonds. It also describes the benefits of issuance and investment in Green Bonds, as a reference for issuers who are considering to issue Green Bonds and for investors who are considering to invest in them.

Section 2 of Chapter 2 describes expected elements of Green Bonds and examples of possible approaches.

Section 1 of Chapter 3 provides an overview of Sustainability-Linked Bonds as well as their benefits to issuers and investors.

Section 2 of Chapter 3 describes expected elements of Sustainability-Linked Bonds and examples of possible approaches.

The precision of wording in Chapters 2 and 3 is as follows:

(i) Sentences containing the word “should” indicate essential elements for bonds labeled as “green” or “sustainability-linked”.

(ii) Sentences containing the word “recommend” indicate elements which are desirable and strongly considered better to adopt, but not requisite elements for bonds labeled as “green” or “sustainability-linked” bond. *

[*The use of external reviews is placed as Key Recommendations in the ICMA Green Bond Principles (GBP) and the Guidelines and is an important element to enhance the transparency of the bonds.]

(iii) Sentences containing the phrase “encourage” indicate elements that are considered better to adopt, but not requisite elements for bonds labeled as “green” or “sustainability-linked” bond.

(iv) Sentences containing the phrase “to be considered” are examples of possible approaches and interpretations related to Green Bond and Sustainability-Linked Bond, although they are not requisite for labels as “green” or “sustainability-linked”.

Chapter 4 describes expected procedures for investors.

5. How to Cite these Guidelines

When citing these Guidelines, they should be referred to as the “Green Bond Guidelines 2024” when specifically referencing the Green Bond sections, and as the “Sustainability-Linked Bond Guidelines 2024” when specifically referencing the Sustainability-linked Bond sections.

Chapter 2 Green Bonds

Section 1 Overview of Green Bonds

1. Definition of Green Bonds

Green Bonds are bonds issued to raise funds for eligible domestic and overseas Green Projects. Specifically, these bonds have the following features: (i) the proceeds, or an equivalent amount, will be exclusively allocated to eligible Green Projects, (ii) proceeds are tracked and managed in a reliable manner, and (iii) transparency is ensured by reporting after the issuance of the bonds.

The issuers of Green Bonds include: (i) corporations that raise funds for Green Projects (including Special Purpose Companies ("SPCs"[14]) that only handle Green Projects), (ii) financial institutions that raise investment funds and loans for Green Projects, and (iii) local governments that raise funds for Green Projects.

Investors in Green Bonds include: (i) institutional investors, such as pension funds and insurance companies that commit to ESG (environmental, social, and governance) investments; (ii) investment managers entrusted with the management of ESG investments, and (iii) individual investors who focus on the specific use of the proceeds.

2. Benefits of Green Bonds

(i) Benefits to Issuers

Benefits for issuers of issuing Green Bonds include the followings:

1) Improve corporate sustainability and dialogue with investors

Working on issuance of Green Bonds may lead to the development and implementation of sustainability strategy, risk management, and governance systems within the organizations. This also helps issuers satisfy the sustainability information disclosure requirement. These developments will lead to improve the issuer's ESG evaluations in the mid-to-long term and thus possibly enhance its corporate value.

Furthermore, dialogue with investors acquired through the issuance of Green Bonds may

[14] A SPC (Special Purpose Company) is a corporation established for the limited purpose of acquisition of and financing backed by specific assets (real estate, receivable).

lead to the further improvement of corporate sustainability.

2) Strengthen a funding base by acquiring new investors and stabilize funding through dialogue with investors

Diversifying a funding base is an effective means for issuers to reinforce their fundraising strategy. Green Bond offers issuers the opportunity to reinforce their funding base by acquiring new investors who value investments that help to tackle environmental problems such as climate change. In addition, through dialogue with investors, mutual understanding of each other's views and initiatives may be deepened, leading to stable funding.

3) Enhance corporate reputation by promoting Green Projects

Since the use of Green Bond proceeds is limited to Green Projects, if issuers, such as companies or local governments, issue Green Bonds, the proceeds are allocated only to Green Projects, leading to promoting such projects. Furthermore, disclosure requirements by the green bond market will ensure a highly transparent Green Bond framework and subsequent reporting. Therefore, issuers can demonstrate that they are actively promoting Green Projects by issuing Green Bonds, which can enhance their reputation.

4) Possibility of gaining pricing benefits

Depending on market conditions, Green Bonds could offer pricing benefits if investor demand is high. Moreover, Green Bonds can be an alternative financing measure for those with limited access to loans. For example, it may be difficult for companies that have not built solid relationships with financial institutions yet, such as emerging renewable energy companies, to obtain loans with favorable terms. In such cases, if the company issues Green Bonds or similar instrument that uses cash-flow generated from renewable energy or other comparable projects with strong business viability to repay interest and redeem bonds, then that company may be able to raise funds on relatively favorable terms from investors who are well-versed in evaluating the feasibility of such businesses.

(ii) Benefits to investors

The benefits to investors investing in Green Bonds include the followings:

1) Satisfy ESG investment requirements and enhance reputation

Some institutional investors are committed to a certain scale of ESG investment. For such investors, Green Bonds are products that have transparent frameworks on green characteristics in accordance with market practices, and thus satisfy their ESG investment requirements as well as generate stable cashflows unless in the case of defaults. Moreover, investors that do not have such commitments can demonstrate that they actively invest in

Green Bonds and support Green Projects, thereby enhancing their reputation while obtaining stable cash flows.

2) Achieve both investment returns, and environmental and social benefits

By investing in Green Bonds, investors can help issuers generate environmental and social benefits (listed below in (iii)) that contribute to creating a sustainable society while simultaneously gaining returns on their investments.

3) Enable direct investments in Green Projects

In light of the global quest for lower GHG emissions based on the Paris Agreement, it is expected that the demand for investment in Green Projects related to renewable energy and energy efficiency will increase substantially. Green Bonds offer investors the opportunity to invest directly in such projects.

4) Mitigate risks

Some articles indicate that Green Bonds can be less volatile than conventional bonds. Therefore, green bonds could be an effective investment for those who seek to control the risk of price fluctuations. Moreover, when renewable energy or energy efficiency projects are the use of proceeds of Green Bond, such Green Bonds may be effective as a means of mitigating investors' own climate transition risks, which is expected to arise as the world strives for significant reductions in GHG emissions based on the Paris Agreement.

5) Enable effective engagement on ESG matters

Green Bonds enable investors to engage more effectively with issuers on holistic environmental impacts, including positive environmental impacts and associated negative environmental and social impacts, through evaluating disclosed sustainability information such as environmental impacts and better understanding issuers' sustainability/ESG strategies. Such efforts will lead to a virtuous cycle of enhancing issuers' sustainability and improving investors' mid-to-long term investment returns, which in turn will generate environmental impacts through investment and realise a sustainable society.

(iii) Environmental and Social Benefits

Environmental and social benefits that can be achieved from the issuance of and investments in Green Bonds include the followings:

1) Contribute to global environmental conservation

The dissemination of Green Bonds expands private investments in Green Projects, such as renewable energy and energy efficiency projects, and contributes to the long-term

substantial reduction in GHG emissions in Japan and beyond. Moreover, Green Bonds can mobilize capital to Green Projects beyond climate mitigation, thereby contributing to the prevention of the degradation of natural capital, which is the foundation of long-term profits for companies.

2) Raise individuals' awareness of green investments

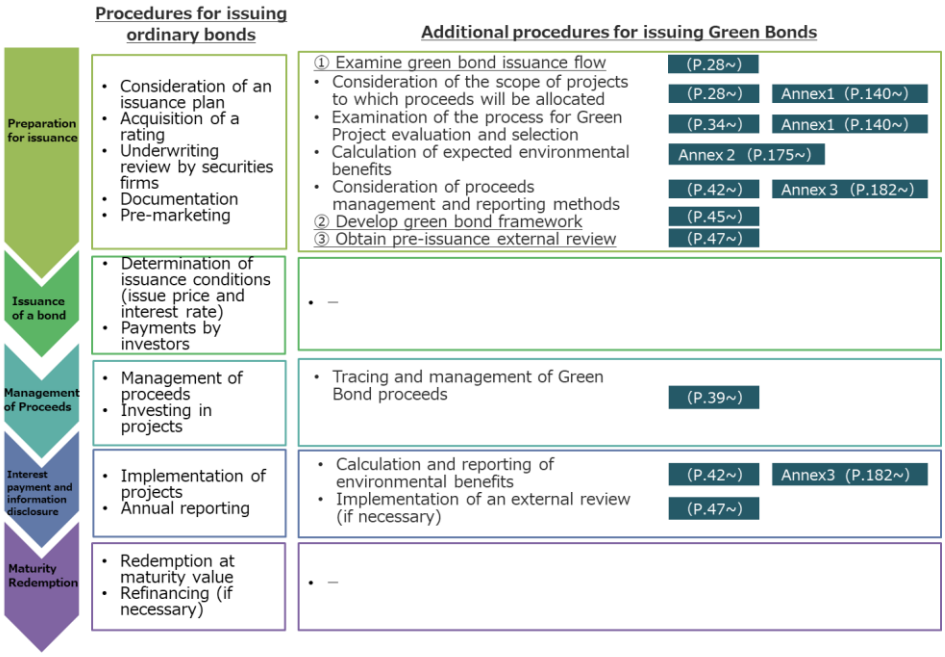
The dissemination of Green Bonds will enhance individuals' awareness of green investments, which will in turn motivate institutional investors, who are the trustees of individuals' assets, to actively invest in green projects. Moreover, it will enhance individuals' interest in the use of own savings and investments, contributing to greening the economy as a whole.

3) Contribute to resolving social and economic issues through the promotion of Green Projects

Promoting Green Projects through the dissemination of Green Bonds may lower energy costs, strengthen energy security, reactivate the regional economy, and enhance resilience in the event of disasters.

3. Green Bond Issuance Flow

Companies, local governments, or other organizations that issue Green Bonds need to follow extra procedures, in addition to the procedures required for issuing ordinary corporate bonds, municipal bonds, and securitized products, etc. These extra procedures are illustrated below:



*The page numbers in the figure refer to the relevant sections of these guidelines.

Section 2 Expected Components of Green Bonds and Examples of Possible Approaches

1. Core Components of Green Bonds

1-1. Use of Proceeds

【Green Bond Principles】

The cornerstone of a Green Bond is the utilisation of the proceeds of the bond for eligible Green Projects, which should be appropriately described in the legal documentation of the security. All designated eligible Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer.

【Guidance】

[Use of proceeds]

1) "The legal documentation of the security" may include, but is not limited to, a prospectus and other relevant documents.

2) Green Projects may have associated negative environmental and/or social impacts, in addition to their intended environmental benefits. Green Projects that provide clear environmental benefits described above are projects that the issuer considers that such negative impacts are not excessive in comparison to the environmental benefits.

3) Annex 1 shows some of the typical examples of such negative impacts.

【Green Bond Principles】

In the event that all or a proportion of the proceeds are or may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced, and, to the extent relevant, the expected look-back period for refinanced eligible Green Projects.

【Guidance】

[Measures for when proceeds are allocated to refinancing]

4) While the proceeds allocated to refinancing can maintain existing Green Projects, these Green Projects have already started before the refinancing takes place, and thus have different environmental additionality from initial financing of new Green Projects.

5) The explanations provided by issuers to investors includes: (1) the estimated amount (or share) of the bond proceeds being allocated for refinancing, and (2) which Green Projects (or Green Project categories) are to be refinanced.[15]

6) In cases where the percentage of proceeds allocated to new Green Projects is greater than that for refinancing, providing an estimated amount (or share) of the proceeds being allocated to a new project may serve to enhance the assessment of the Green Bond.

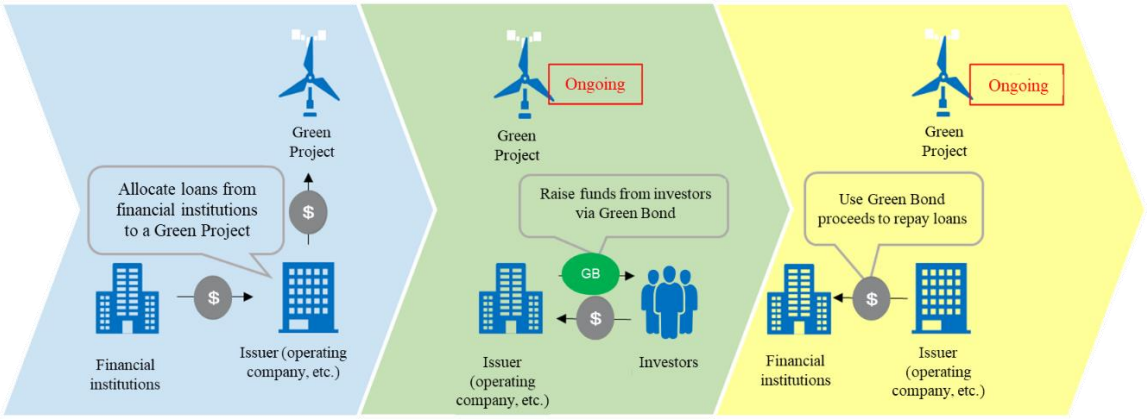
7) When Green Bonds are issued multiple times to refinance an asset that requires long-term maintenance, the issuer should clearly disclose the asset's age, remaining useful life and the amount to be refinanced, as at the time of the bond issuance, evaluate the long-term sustainability of environmental benefits and obtain an assessment from an external reviewer as necessary. (ICMA (2022.1) "Guidance Handbook and Q&A")

[15] In the case of corporate bonds, the Cabinet Office Order on Disclosure of Corporate Affairs requires the disclosure of the information set out in this section. In the case of other types of bonds, it is also recommended that such information be disclosed in order to ensure transparency.

<Possible refinancing examples>

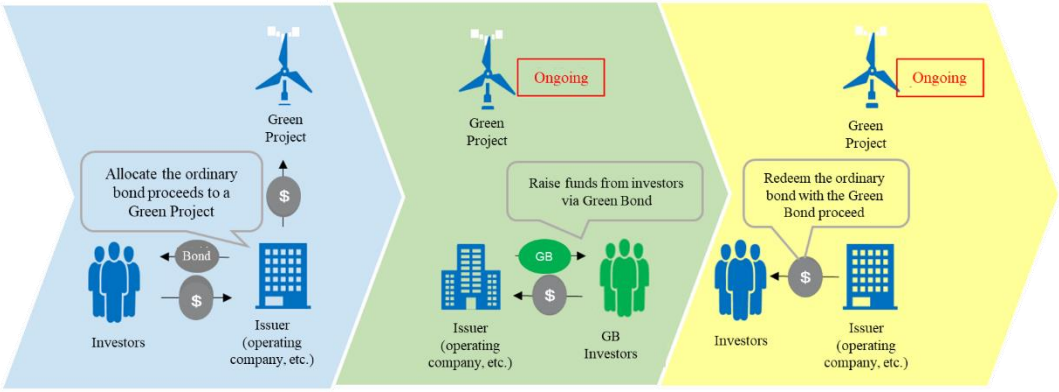
Possible examples are not limited to the following:

- Cases where the Green Bond proceeds are allocated to repay (refinance) loans related to Green Projects.

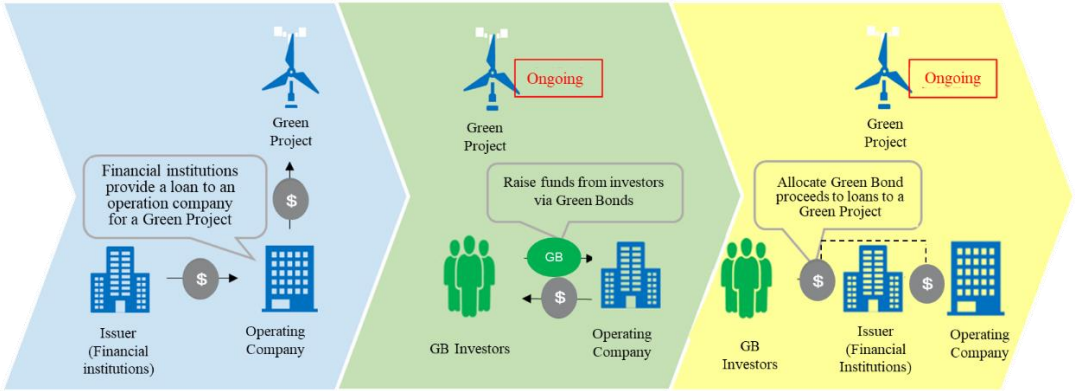


- Cases where new Green Bond proceeds are used to redeem a bond that has been issued to finance existing or completed Green Projects at maturity.

  * An example of a completed Green Project may include the construction of green buildings.



- Cases where financial institutions allocate Green Bond proceeds as a resource for existing loans linked to Green Projects.



【Green Bond Principles】

The GBP explicitly recognise several broad categories of eligibility for Green Projects, which contribute to environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.)

The following list of project categories, while indicative, captures the most commonly used types of projects supported, or expected to be supported by the Green Bond market. Green Projects include assets, investments and other related and supporting expenditures such as R&D that may relate to more than one category and/or environmental objective. Three environmental objectives identified above (pollution prevention and control, biodiversity conservation and climate change adaptation) also serve as project categories in the list. As such, they refer to the projects that are more specifically designed to meet these environmental objectives.

The eligible Green Projects categories, listed in no specific order, include, but are not limited to:

• Renewable energy (including production, transmission, appliances and products);

• Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products);

• Pollution prevention and control (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy);

• Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);

• Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);

• Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);

• Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation);

• Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and

early warning systems);
• Circular economy adapted products, production technologies and processes (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services); and/or certified eco-efficient products;
• Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance.

While the GBP's purpose is not to take a position on which green technologies, standards, claims and declarations are optimal for environmentally sustainable benefits, it is noteworthy that there are several current international and national initiatives to produce taxonomies and nomenclatures, as well as to provide mapping between them to ensure comparability. These may give further guidance to Green Bond issuers as to what may be considered green and eligible by investors. These taxonomies are currently at various stages of development. Issuers and other stakeholders can refer to examples in the sustainable finance section of ICMA's website.

Furthermore, there are many institutions that provide independent analysis, advice and guidance on the quality of different green solutions and environmental practices. Definitions of green and Green Projects may also vary depending on sector and geography.

Finally, where issuers wish to finance projects towards implementing a net zero emissions strategy aligned with the goals of the Paris Agreement, guidance on issuer level disclosures and climate transition strategies may be sought from the Climate Transition Finance Handbook.

【Guidance】

[Examples of the use of proceeds]

8) Examples of the use of proceeds may include Green Projects described in Annex 1.
9) As stated in Chapter 1 of the Guidelines, when explaining a project aimed at climate change mitigation to the market in the context of climate transition strategy aligned with the goals of the Paris Agreement, an issuer can refer to the four key elements (1. Issuer's climate transition strategy and governance; 2. Business model environmental materiality; 3. Climate transition strategy and targets to be 'science-based'; and 4. Implementation transparency) recommended in Climate Transition Finance, and may claim as Climate Transition Finance. In Japan, the Basic Guidelines on Climate Transition Finance have been established by the Financial Services Agency (FSA), the Ministry of Economy, Trade and Industry (METI), and the Ministry of the Environment (MOE) as Japan's practical guidelines consistent with the ICMA's

Climate Transition Finance Handbook.[16]

[16] The below website of the Ministry of Economy, Trade and Industry (METI) summarises the overall picture of measures related to transition finance.
https://www.meti.go.jp/english/policy/energy_environment/transition_finance/index.html

1-2. Process for Project Evaluation and Selection

【Green Bond Principles】

The issuer of a Green Bond should clearly communicate to investors:

• The environmental sustainability objectives of the eligible Green Projects;

• The process by which the issuer determines how the projects fit within the eligible Green Projects categories (examples are identified above); and

• Complementary information on processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s).

【Guidance】

[Communication with investors in advance on the process for project evaluation and selection]

1) When no individual Green Project to which Green Bond proceeds will be allocated is determined (e.g., (i) in cases where a corporation or a local government issues a Green Bond to raise funds for Green Projects in the relevant business and project category, and (ii) in cases where financial institutions raise funds for investments and loans for a large number of Green Projects, etc.), issuers should establish criteria for determining the eligibility of Green Projects based on the environmental objectives, and provide investors with such information, in addition to the above information in the Green Bond Principles, in advance. This communication may be unnecessary, when individual Green Projects to which Green Bond proceeds will be allocated are already determined.

2) When individual Green Projects have not been determined, the issuer may also consider establishing a common criteria and process for evaluating and selecting projects for Green Bonds, Green Loans and or other financial instruments, as well as the process by which the issuer identifies, mitigates and manages the perceived environmental and social risks associated with the relevant project(s).

3) Depending on the process put in place for the allocation of proceeds, it is recommended that issuers either provide a list of projects to which green bond proceeds have been allocated, or report solely on a portfolio level. Communication with investors on the use of proceeds should specify the project category of the Green Projects, such as the construction of facilities for a wind power generation project or lending to projects related to biomass power generation, so that investors and other market participants are able to evaluate the

appropriateness of the use of proceeds. In cases where individual Green Projects have been determined, it is recommended that issuers clearly specify the relevant projects. (ICMA (2024.6) ”Handbook Harmonised Framework for Impact Reporting”)

[Environmental sustainability objectives]

4) Environmental sustainability objectives are the environmental benefits that the issuers intend to achieve through the issuance of Green Bonds, such as climate mitigation and adaptation and the conservation of biodiversity.

[**Criteria]**

5) Criteria provides the basis for evaluating and selecting eligible Green Projects in light of the environmental sustainability objective. For instance, if climate mitigation or adaptation is the main environmental objective, Green Projects that reduce GHG emissions such as renewable energy projects would be considered for the use of proceeds.

6) The following are the examples of the evaluation and selection criteria for Green Projects. It is recommended for issuers to also communicate to investors, in advance, any environmental standards or certifications that they will refer to in evaluating and selecting Green Projects.

<Examples of “criteria” for the evaluation and selection of Green Projects>

*These are examples only and not limited to the following:

- Projects falling under categories specifically given as examples for the use of proceeds in the GBP or in the Guidelines.
- Projects for renewable energy not falling under the category of projects with significant negative impacts on the environment and society as specified in the Equator Principles.
- Projects falling under the category of projects that build energy efficient buildings eligible for certification by environmental certification schemes such as LEED, CASBEE, and BELS.

[Process by which the issuer determines how the projects fit within the eligible Green Projects categories]

7) The process for evaluation and selection of Green Projects refers to, for example, the basis for how issuers determine why certain projects can provide environmental benefits appropriately in light of the objectives and criteria for the use of Green Bond proceeds, how and by whom the above criteria are applied and used to determine whether Green Projects are eligible in light of the environmental objectives (which division actually conducts the evaluation and selection, and determines the eligibility).

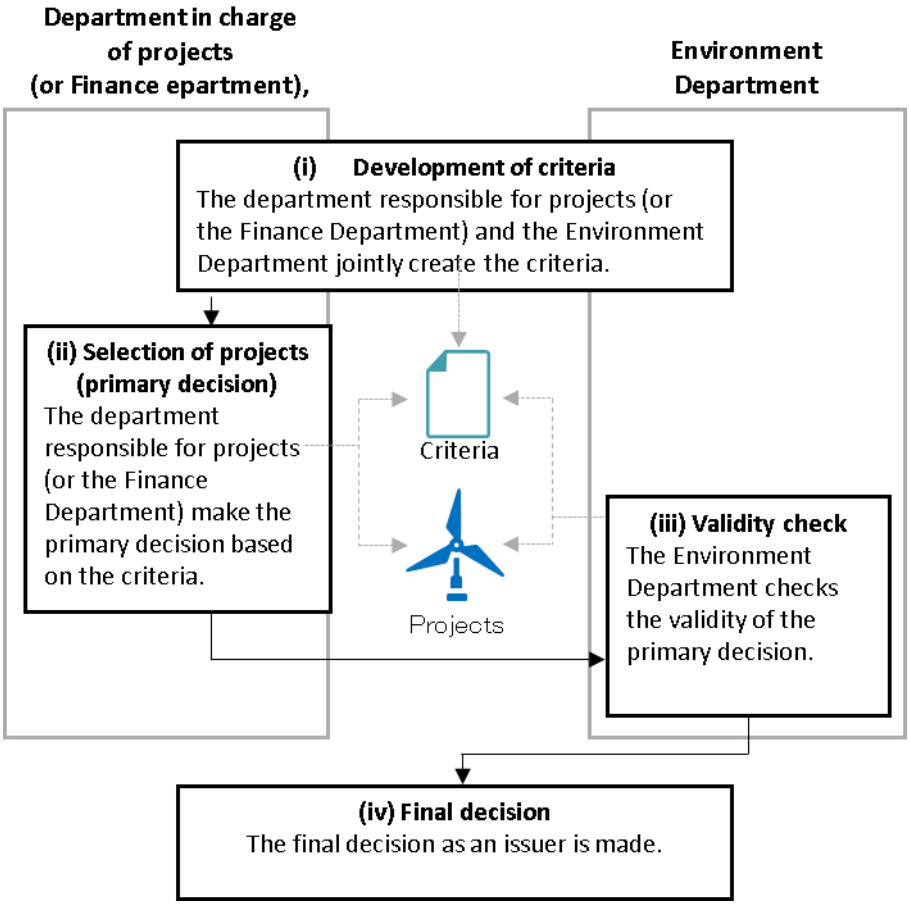
8) It is recommended that internal departments with environmental expertise, such as environment related departments, or external institutions are involved in the evaluation and selection process of Green Projects to ensure suitability from an environmental point of view.

9) The following are examples of project evaluation and selection process for Green Projects:

<An example of a decision-making process>

* This is an example only and not limited to the following.

- An internal department responsible for the projects (or the Finance Department) and the Environment Department jointly develop the criteria. After the department responsible for the projects (or the Finance Department) uses the criteria to make the primary decision on project eligibility, the Environment Department checks the validity of the primary decision before making the final decision as the company.



[Processes related to the identification, mitigation, and management of environmental and social risks]

10) The process of identifying, mitigating, and managing associated environmental and/or social risks refers to the identification, mitigation, and management of significant negative environmental and/or social impacts as well as the environmental and social risks associated with the implementation of the project.

11) In cases where Green Projects have associated negative environmental and/or social risks along with the intended environmental benefits, issuers should explain these negative impacts in addition to the assessment results and how the issuer will address them, in their communication with investors, so that investors and market participants can appropriately evaluate these impacts.

12) For example, hydropower generation above a certain scale may have associated negative impacts such as land modification, etc (see Annex 1 of this Guidelines).

13) These negative impacts could outweigh or diminish the environmental benefits and the value of Green Projects, and it is important that the process for identifying and managing the potentially significant environmental and social risks of Green Projects are explained to investors in advance.

【Green Bond Principles】

Issuers are also encouraged to:

• Position the information communicated above within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability.

• Provide information, if relevant, on the alignment of projects with official or market-based taxonomies, related eligibility criteria, including if applicable, exclusion criteria; and also disclose any green standards or certifications referenced in project selection.

• Have a process in place to identify mitigants to known material risks of negative social and/or environmental impacts from the relevant project(s). Such mitigants may include clear and relevant trade-off analysis undertaken and monitoring required where the issuer assesses the potential risks to be meaningful.

【Guidance】

[Incorporation into overarching goals, strategies, etc.]

14) "Issuer's overarching objectives, strategy, policy" may include medium-term management

plans and sustainability strategies, etc. It is recommended that, post issuance, issuers position the information in the context of medium-term management plan and sustainability strategy etc., and provide explanation on the information above to investors upon their request.

[Alignment with related standards and certifications, and information disclosures]

15) Issuers are recommended to disclose relevant information and environmental standards and certifications referenced (e.g., Annex 1 of the Guidelines, taxonomies, other environmental standards and certifications) when they use such information or standards as eligibility criteria for Green Projects or exclusion criteria for negative risks associated with Green Projects. Issuers are also recommended to explain how the actual Green Project is aligned with the referenced environmental standards and certifications, when and if issuers refer to them. In addition, when obtaining external certifications, issuers are recommended to explain the expected environmental benefits to be achieved, rather than just satisfying the certification requirements.

1-3. Management of Proceeds

【Green Bond Principles】

The net proceeds of the Green Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for eligible Green Projects.

【Guidance】

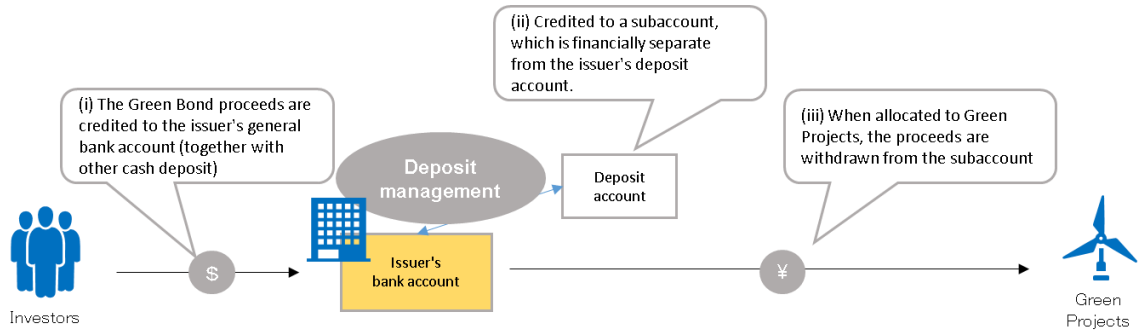
[Methods for the tracking and management of proceeds]

1) Possible methods for the tracking and management of proceeds include the following:

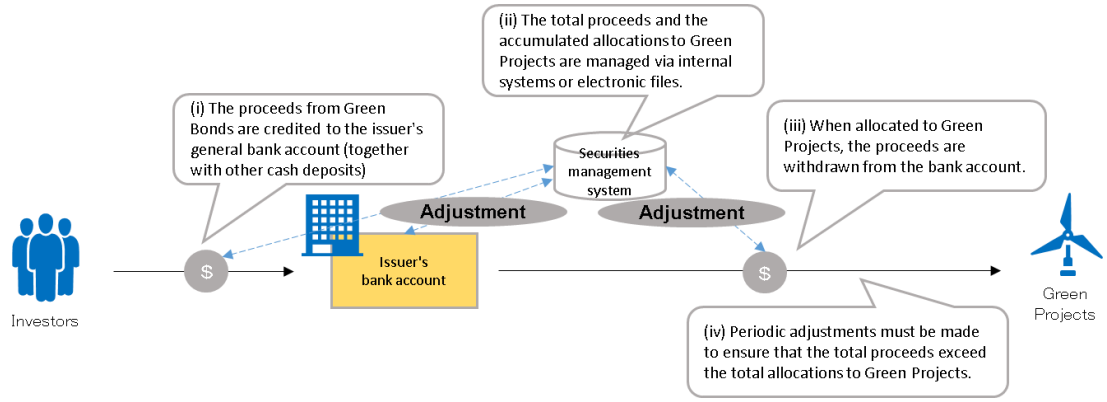
< Examples of possible methods for the tracking and management of proceeds>

* These are examples only and not limited to the following:

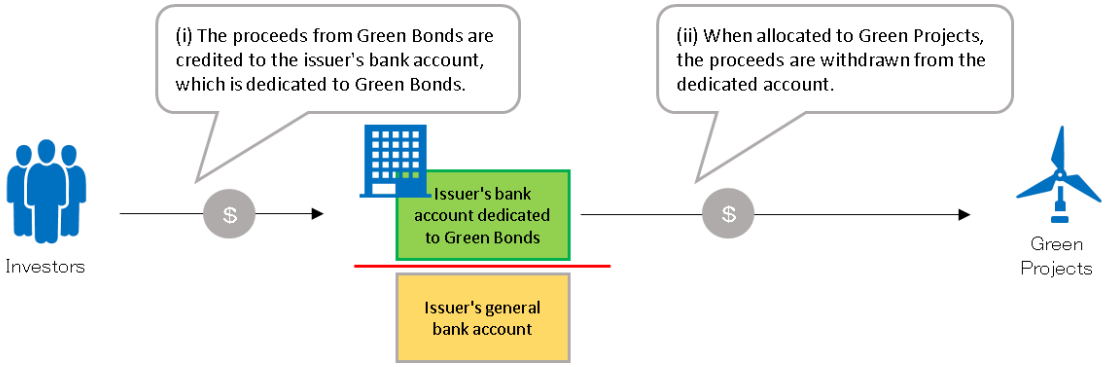
- The Green Bond proceeds are credited to a subaccount that is financially separate from other accounts, and the proceeds are withdrawn from this account when allocated to Green Projects.



- Manage the total proceeds and the accumulated allocations to Green Projects via internal systems or electronic files and periodically adjust to ensure that the latter exceeds the former.



- The Green Bond proceeds are credited to a separate account and managed separately from other business funds. When allocating the proceeds to Green Projects, the proceeds are taken out from the said separate account.



2) Issuers are recommended to appropriately keep evidence documents that demonstrate how the Green Bond proceeds have been tracked and managed.

[Communication with investors in advance on methods for the tracking and management of proceeds]

3) Issuers should communicate to investors, in advance, on how Green Bond proceeds will be tracked and managed.

[Timely allocation of proceeds]

4) It is recommended that the funds raised from a Green Bond should be applied to Green Projects as soon as possible.(ICMA (2024.6)“Guidance Handbook”)

【Green Bond Principles】

So long as the Green Bond is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible Green Projects made during that period. The issuer should make known to investors the intended types of temporary placement for the balance of unallocated net proceeds.

The proceeds of Green Bonds can be managed per bond (bond-by-bond approach) or on an aggregated basis for multiple green bonds (portfolio approach).

The GBP encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking method and the allocation of funds from the Green Bond proceeds (see Key Recommendations section below).

【Guidance】

[Communication with investors in advance on methods to manage unallocated proceeds]

5) Issuers should communicate to investors, in advance, on how unallocated Green Bond proceeds will be managed, when Green Projects to be allocated have not been determined, or when Green Projects have been determined but the proceeds have not been allocated because the timing for allocation has not yet arrived.

[Methods for the management of unallocated proceeds]

6) It is recommended that issuers manage unallocated Green Bond proceeds as an asset with high liquidity and safety such as cash, cash equivalents, or short-term financial assets.

7) As a particularly advanced example, unallocated proceeds were deposited into a bank account with sound environmental business strategies in order to reflect the green preference of investors. This would be meaningful in instances where investors have a strong preference for their assets to be invested in ESG-related or green financial products.

1-4. Reporting

【Green Bond Principles】

Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments. The annual report should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects, the amounts allocated, and their expected impact. Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the GBP recommend that information is presented in generic terms or on an aggregated portfolio basis (e.g. percentage allocated to certain project categories).

【Guidance】

[Disclosures on the status of the use of proceeds post-issuance]

1) Investors invest in Green Bonds because they expect that their funds will be allocated to Green Projects and will generate environmental benefits. Therefore, the impact in the reporting is an important element in the investor's ongoing monitoring of the effectiveness of investments. Moreover, for an issuer to claim financing through Green Bonds and to gain public support as well as acceptance as such, it is necessary to ensure transparency.

2) The above disclosures may be made available in a readily accessible format, such as on the issuer's official website, to enable investors to obtain the information they require.

[Timing of disclosures]

3) The material developments include, but are not limited to, the sale of the asset or project for which the proceeds are used, a serious accident in the project or the occurrence of an event that affects the green eligibility of the project.

[Methods and contents of disclosures]

4) A brief description of each Green Project includes the up-to-date progress of the Green Project.

5) In case where there are unallocated Green Bond proceeds, the contents of disclosures include the amount or share of unallocated proceeds and the expected timing of allocation,

in addition to how the unallocated proceeds will be managed until allocation[17]

6) If Green Bond proceeds have been allocated to the refinancing of existing projects, it is recommended that disclosure includes: 1) the approximate amount (or share) of proceeds allocated to refinancing, and 2) a list of the Green Projects (or the project categories) refinanced.

7) Information may be presented in generic terms or in an aggregated portfolio. For example, disclosure by project category in generic terms, such as wind power generation projects, projects to introduce energy efficient equipment, or projects for the construction and management of waste recycling-related facilities.

8) Other specific ways of disclosures may include those described in Annex 3.

【Green Bond Principles】

Transparency is of particular value in communicating the expected and/or achieved impact of projects. The GBP recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. Issuers should refer to and adopt, where possible, the guidance and impact reporting templates provided in the Harmonised Framework for Impact Reporting.

The use of a summary, which reflects the main characteristics of a Green Bond or a Green Bond programme, and illustrates its key features in alignment with the four core components of the GBP, may help inform market participants. To that end, a template can be found in the sustainable finance section of ICMA's website which once completed can be made available online for market information.

【Guidance】

[Indicators and methods for calculating environmental benefits]

9) In disclosing the expected environmental benefits of the projects, it is important that issuers use appropriate indicators, while ensuring consistency with "Environmental sustainability objectives" and "Criteria" specified in "2. Process for Project Evaluation and Selection," and the characteristics of Green Projects.

[17] In the case of corporate bonds, the Cabinet Office Order on Disclosure of Corporate Affairs requires the disclosure of the information set out in this section in addition to the intended types of temporary placement for the balance of unallocated net proceeds required by the GBP. In the case of other types of bonds, it is also recommended that such information be disclosed in order to ensure transparency.

10) In disclosing the expected environmental benefits of projects, issuers are recommended, where feasible, to use quantitative indicators and disclose information on underlying methodologies and/or assumptions with the indicators. With both international and domestic investors increasingly calculating the GHG emissions of their own investments and aiming to achieve net zero emissions, the quantification of environmental benefits has also become important from the investor perspective.

11) When quantification is difficult, external certifications, such as LEED, CASBEE, BELS, FSC, MSC, or ASC, obtained through Green Projects may be considered as qualitative indicators.

12) Other specific examples of quantitative indicators for the expected environmental benefits of projects may include, but are not limited to, those listed in Annex 1.

13) Specific examples of methodologies for the calculation of environmental benefits when using quantitative indicators may include those explained in Annex 2

2. Key Recommendations

2-1 Green Bond Frameworks

【Green Bond Principles】

Issuers should explain the alignment of their Green Bond or Green Bond programme with the four core components of the GBP (i.e. Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting) in a Green Bond Framework or in their legal documentation. Such Green Bond Framework and/or legal documentation should be available in a readily accessible format to investors.

【Guidance】

[General information]

1) A prospectus may be considered as the legal documentation. Disclosures may be made available in a readily accessible format, such as on the issuer's official websites, to enable investors to obtain the information they require.

2) Such a framework or legal documentation enables investors to make investment decisions with the necessary and sufficient information on the eligibility of Green Bonds.

【Green Bond Principles】

It is recommended that issuers summarise in their Green Bond Framework relevant information within the context of the issuer's overarching sustainability strategy. This may include reference to the five high level environmental objectives of the GBP (climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control). Issuers are also encouraged to disclose any taxonomies, green standards or certifications referenced in project selection.

【Guidance】

[General information]

3) Environmental standards and certifications referenced in project selection include Annex 1 of the Guidelines.

4) Issuers are recommended to explain how the actual Green Projects are aligned with the referenced environmental standards and certifications, when and if issuers have referred to them.

5) In addition, when obtaining external certifications, issuers are recommended to explain the environmental benefits to be achieved with the certification, rather than just meeting the certification requirements.

【Green Bond Principles】

When communicating Paris-aligned transition strategies in the context of projects targeting climate change mitigation, issuers are encouraged to use guidance from the Climate Transition Finance Handbook.

【Guidance】

[General information]

6) For a specific use of the Climate Transition Finance Handbook, issuers can refer to the four key elements of Climate Transition Finance (1. Issuer's climate transition strategy and governance; 2. Business model environmental materiality; 3. Climate transition strategy and targets to be 'science-based'; and 4. Implementation transparency) and make a clear claim for climate transition finance, in a framework or legal documentation such as the prospectus. For climate change mitigation projects, using a framework such as the final report of the Task Force on Climate-Related Financial Disclosures (TCFD recommendations) to explain the overarching climate transition strategy of the issuer will also serve the interests of investors, which are increasingly taking into account the issuer's overall strategy when making investment decisions.

2-2 External Reviews

【Green Bond Principles】

It is recommended that issuers appoint (an) external review provider(s) to assess through a pre-issuance external review the alignment of their Green Bond or Green Bond programme and/or Framework with the four core components of the GBP (i.e. Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting) as defined above.

Post issuance, it is recommended that an issuer's management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking and the allocation of funds from the Green Bond proceeds to eligible Green Projects.

There are a variety of ways for issuers to obtain outside input to their Green Bond process and there are several types of review that can be provided to the market. Issuers should consult the Guidelines for External Reviews for recommendations and explanations on the different types of reviews. These Guidelines have been developed by the GBP to promote best practice. They are a market-based initiative to provide information and transparency on the external review processes for issuers, underwriters, investors, other stakeholders and external reviewers themselves.

【Guidance】

[General information]

1) There are a variety of types of external reviews, including Second Party Opinions (SPO), Verifications, Certifications and Scorings/Ratings. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

A) Second Party Opinion (SPO)

An institution with environmental/ social/sustainability expertise that is independent from the issuer may provide a Second Party Opinion. The institution should be independent from the issuer's adviser for its green, social, sustainability and Sustainability-Linked Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second Party Opinion. Any concerns on the institution's independence should be disclosed to investors.

B) Verification

Issuers can obtain independent verification against a designated set of criteria. Such criteria are those pertaining to

environmental, social and sustainability, or, in the case of Sustainability-Linked Bonds explained in Chapter 3, to KPI and SPTs.

C) Certification

Issuers can have their bond or associated bond framework, the use of proceeds, or the KPI or SPTs, certified against external green, social or sustainability standards or labels. Alignment with evaluation criteria of the standard or label is normally tested by a qualified third party.

D) Scoring/Rating

Issuers can have their bond, or associated bond framework, or a key feature such as Use of Proceeds, selection of KPIs, calibration of the level of ambitiousness of SPTs, evaluated or assessed by third parties, such as specialized research providers or rating agencies, according to an established scoring/rating methodology.

2) In addition to the "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews" ICMA (2022.6), the "Code of Conduct for ESG Evaluation and Data Providers" FSA (2022.12) should be referred to in the Japanese market. The Code of Conduct sets out six principles, guidelines, and their concept under the following four topics, based on IOSCO's "Environmental, Social, and Governance (ESG) Ratings and Data Product Providers Final Report" as well as the discussions held in the "Technical Committee for ESG Evaluation and Data Providers, etc.," under the FSA.

・ Ensuring transparency

ESG evaluation and data providers should disclose the purpose, concept, and the basic methodology of their ESG evaluation.

・ Human resources development

ESG evaluation and data providers should secure necessary professional human resources and develop the professional skills of employees

・ Avoiding conflicts of interests

ESG evaluation and data providers should identify their activities and situations that could potentially undermine the independence, objectivity, and neutrality of their businesses, and avoid potential conflicts of interest or appropriately manage and reduce the risk of conflict of interest.

・ Communication with companies

ESG evaluation and data providers should clarify the point of contact for the companies they assess, ensure that the data on which the evaluation is based shall be available for confirmation and correction and that such procedures are made publicly available in advance.

3) In addition, ICMA published the "Code of Conduct for ESG Ratings and Data Providers" in December 2023, which is also available for reference.

[Significance of using external review]

4) Such reviews may be useful in the following cases, but are not limited to

- Cases where Green Projects designated for a Green Bond include those that have negative environmental and social impacts in addition to environmental benefits, and where an issuer can obtain an objective evaluation of the appropriateness in allocating proceeds to such projects.
- Cases where an issuer can obtain an objective evaluation of the appropriateness of the criteria or the appropriateness of the decisions regarding the evaluation and selection of Green Projects based on such criteria, when expertise existing within the issuer's organization is insufficient.
- Cases where an issuer can obtain an objective evaluation of the appropriateness of the environmental benefit calculation method developed by the issuer when the Green Projects to which the proceeds will be allocated are relatively unique and therefore, is lacking in an existing framework for calculating the environmental benefits of the projects.
- Cases where an issuer can obtain reviews by a third party evaluation institution to assist in the understanding of Green Bonds if and when anticipated investors are from overseas and expected to be unfamiliar with Green Projects and related information in Japan.

[Multiple issuances under one Framework]

5) In cases where an external review of the entire Green Bond framework was obtained in the past, the issuer may not have to obtain an external review again when issuing a new Green Bond under the same framework. However, careful consideration may be necessary, as approaches to considering the appropriateness of the schemes of Green Projects and Green Bonds and or the evaluation criteria of external reviewers may have changed since the last review. For example, an external review may not be necessary if an SPC that exclusively conducts Green Projects, which has obtained a review on the environmental benefits of its projects, is to issue multiple Green Bonds for the same type of projects. However, when an issuer does not obtain an external review, investors and other market participants may request that the issuer explain the appropriateness of the Green Bond framework with

sufficient transparency.

【Green Bond Principles】

The GBP encourage external review providers to disclose their credentials and relevant expertise and communicate clearly the scope of the review(s) conducted. Issuers should make external reviews publicly available on their website and/or through any other accessible communication channel as appropriate and if feasible, as well as use the template for external reviews available in the sustainable finance section of ICMA's website.

【Guidance】

【Code of conduct for external reviewers】

6) External reviewers should follow the following codes of conduct when giving reviews. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

1) Ethical standards as professionals

The below ethical standards of external reviewers as professionals are based on the Code of Ethics for Professional Accountants established by the International Ethics Standards Board for Accountants of the International Federation of Accountants, which the ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews" mention that external reviewers should look to adhere to, and the corresponding JICPA Code of Ethics established by the Japanese Institute of Certified Public Accountants.

(i) Integrity

External review providers must act with integrity at all times and must not engage in the preparation and or disclosure of reviews based on reports or information that they recognise to be:

- Information that contains materially false or misleading statements
- Information that contains statements or information that have been prepared without due caution required in the performance of duties
- When any omission or obfuscation of necessary information will cause misunderstanding, information that omits or obfuscates such information

(ii) Objectivity

External review providers should avoid holding preconceptions, avoid conflicts of interests, avoid succumbing to undue influence from others and maintain fairness at all times. As

professionals, external review providers should refuse to provide a review if and when requested to distort facts or to deliver a biased review for the purpose of justifying a predetermined conclusion.

Maintaining fairness requires ensuring objectivity in the judgment of business operations. More specifically, external reviewers should be independent from, and should be a third party to, the issuer. Independency/impartiality should be judged based on personal and or capital relationships. For example, an external review is not considered to be independent or impartial in the following cases:

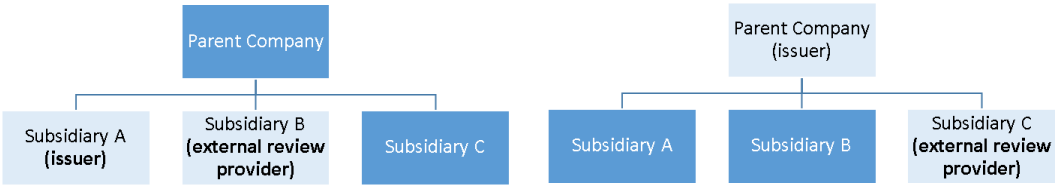
<Examples where independency/impartiality is not ensured >

* Possible examples are not limited to the following:

<Capital relationships>

- Cases where an issuer and an external review provider are subsidiaries of the same parent company
- Cases where an issuer is the parent company of an external review provider (subsidiary)

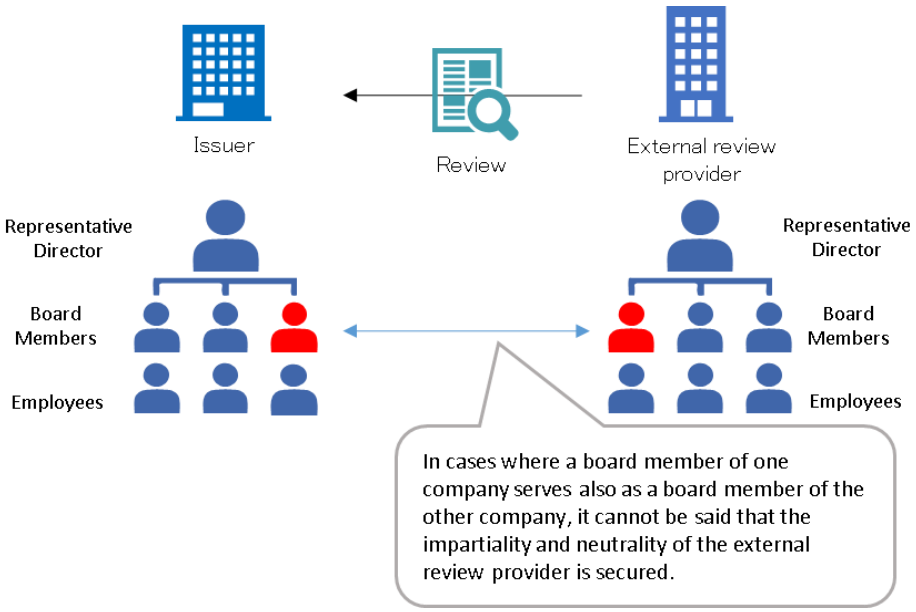
<Personal relationships>



<Personal relationships>

- Cases where a board member or one in a similar position* of one company (issuer) also serves as a board member of the other company (external reviewer)

*A board member or one in a similar position could include the representative director, auditor, executive, and or one in any other position with legal authority over the execution and or the auditing of operation and finances under corporate law, civil law, and or any other relevant law, regardless of title.



(iii) Abilities and due care as professionals

External reviewers need to maintain the level of abilities necessary to perform their duties when providing an external review in order to provide an appropriate external review.

External reviewers should adhere to requirements as professionals and perform their duties with due care.

External reviewers should ensure that any party working under their instructions is receiving appropriate training and supervision when performing their duties.

The following professional expertise is required of external reviewers.

- To understand and be up to date on relevant knowledge, including international market trends and the most recent professional practices in their specialist areas, to always endeavor to improve their skills, and to be equipped with the latest specialist knowledge.
- To have the relevant expertise, for the type of external reviews they provide and for the type of Green Projects for which they provide a review.
- To employ or to ensure the participation of other specialists in areas where they do not have sufficient expertise. It is not necessarily required for one external reviewer to evaluate all aspects of a particular Green Bond. It is possible for more than one external reviewer to review different aspects of a Green Bond based on the respective expertise of each provider.

The professional expertise desirable of external reviewers includes the following:

<Examples of expertise>

* Possible examples are not limited to the following:

1) When reviewing the appropriateness of the Green Projects to which proceeds will be allocated, the appropriateness of the evaluation and selection process of the Green Projects and the appropriateness of environmental benefits

Expertise on criteria to determine the existence of (or lack thereof) environmental benefits, expertise on indicators to be referred to when verifying the method to quantify environmental benefits, and expertise on environmental assessment and environmental certifications

2)When reviewing the appropriateness of the management and allocation of proceeds

Expertise in financial and accounting audits

(iv)Duty of confidentiality

External review providers must not disclose to others or use for the benefit of themselves or third parties any information that has come into their possession in the course of their duties without any justifiable reason. With respect to their compliance with the duty of confidentiality, external reviewers should establish, publish and or provide their customers with policy and measures concerning the protection of customer information.

(v)Actions as professionals

External reviewers should be aware of their position as professionals, adhere to the requirements and expectations of professionals and should not take any action that will harm the credibility of or bring disrepute to external reviewers in general.

2) Requirements of external reviewers as an organization

(vi)External reviewers should have a sufficient organization structure to appropriately undertake external reviews and should have predetermined methodologies and procedures in place to conduct external reviews.

(vii)External reviewers should employ a reasonable number of people who have professional experience and qualifications necessary to cover the areas subject to the external reviews to be conducted.

(viii)When using liability insurance concerning specialist areas, external review providers should note the coverage scope of such insurance (ICMA (2022.6) “Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews”)

3) Matters that should be evaluated by external review providers

(ix)Content of External Reviews are dependent on the type of external review. For a Second Party Opinion, external reviewers should evaluate the following content:

- Alignment with the four elements expected of Green Bonds
- Type of Green Projects intended for the use of proceeds
- Environmental benefits and impact targeted by the eligible green projects
- The potentially material environmental and/or social risks (negative effects) associated with the projects (where relevant).

(x)An SPO can also include an assessment of the issuer's overarching objectives, strategy, and processes relating to environmental and social sustainability.

4) Information which should be included in documents and materials concerning external review results

(xi)External reviewers should include a general description of the purpose of an external review, scope of the review, qualifications of the persons who conduct the external review and their expertise as external reviewers. At the very least, they need to show where such information is available. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

For instance, it is recommended that external reviewers clearly demonstrate their expertise in documents and materials concerning review results by including statements such as the following.

<Examples of description concerning the expertise of external reviewers>

* Possible examples are not limited to the following:

<Expertise>

"Our company has offered environmental evaluation services for about ● years and has solid expertise in this field."

(xii)External reviewers should include, in documents and material concerning their review results, a statement on their independence from the issuer and their policy on conflicts of interest. At the very least, they need to show where such information is available. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

(xiii)There are various types of external reviews. Even if they have the same name, what they evaluate or the criteria they use for evaluation may differ. To assist review users in the understanding of its contents, external reviewers should clearly explain the definitions they use and their analytical approach and methodologies including the evaluation criteria applied to respective items in the documents and materials concerning their review results. For instance, this may include the following. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

<Examples of the description of information concerning external reviews>

* Possible examples are not limited to the following:

This review evaluates the following aspects of the Green Bond:

(i) Pre-issuance review of Green Bonds		
Evaluation Aspects	Target	Evaluation Criteria
- The evaluation of the appropriateness of Green Projects to which the Proceeds will be specifically allocated.	○	Evaluation criteria of the company[18]
- The evaluation of the appropriateness of the criteria for evaluating/selecting Green Projects to which the Proceeds will be allocated and the implementation system for evaluating/selecting Green Projects based on such criteria.	○	Evaluation criteria of the company
- The evaluation of the appropriateness of specific methods to track and manage the proceeds from Green Bonds.		
- The evaluation of the appropriateness of the expected environmental benefits (or actual environmental benefits in the case of refinancing) of Green Projects (including the appropriateness of the methods for calculating environmental benefits and preconditions for the calculation).	○	Evaluation criteria of the company
- The evaluation of the appropriateness of the specific methods for reporting the latest information on the use of proceeds scheduled to be procured through the Green Bonds.		
(ii) Post-issuance Review of Green Bonds		
Evaluation Aspects	Target	Evaluation Criteria
- The evaluation of whether the management of the Green Bond proceeds and the allocation of the proceeds to Green Projects were executed properly by using the methods specified by the issuer before the issuance of the Green Bonds.		
- The evaluation of whether the Green Projects to which the Green Bond proceeds were allocated have actual environmental benefits and if they were calculated properly by using the methods specified by the issuer before the issuance of the Green Bonds.		

(xiv)External reviews should have a conclusion/output, including the limitations of assessments made in external reviews. At minimum, they need to show where such information is available. (ICMA (2022.6) "Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews")

[18] While it is sometimes difficult to disclose detailed evaluation "criteria", it is recommended to clearly state what type of criteria was used as much as possible.

【Green Bond Principles】

Appendix I (June 2022)

Types of Green Bonds

There are currently four types of Green Bonds (additional types may emerge as the market develops and these will be incorporated in GBP updates):

1. Standard Green Use of Proceeds Bond: an unsecured debt obligation with full recourse-to-the-issuer only and aligned with the GBP.

2. Green Revenue Bond: a non-recourse-to-the-issuer debt obligation aligned with the GBP in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes etc., and whose use of proceeds go to related or unrelated Green Project(s).

3. Green Project Bond: a project bond for a single or multiple Green Project(s) for which the investor has direct exposure to the risk of the project(s) with or without potential recourse to the issuer, and that is aligned with the GBP.

4. Secured Green Bond: a secured bond where the net proceeds will be exclusively applied to finance or refinance either:

i. The Green Project(s) securing the specific bond only (a "Secured Green Collateral Bond"); or

ii. The Green Project(s) of the issuer, originator or sponsor, where such Green Projects may or may not be securing the specific bond in whole or in part (a "Secured Green Standard Bond"). A Secured Green Standard Bond may be a specific class or tranche of a larger transaction.

This Secured Green Bond category may include, but is not limited to, covered bonds, securitisations, asset-backed commercial paper, secured notes and other secured structures, where generally, the cash flows of assets are available as a source of repayment or assets serve as security for the bonds in priority to other claims.

For each Secured Green Bond, the issuer, originator or sponsor should clearly specify in its marketing materials, offering documentation or by other means which method defined in (i) or (ii) above is being applied, i.e. whether it is a Secured Green Collateral Bond or a Secured Green Standard Bond.

There should be no double counting of Green Projects under a Secured Green Bond with any other type of outstanding green financing and the issuer, originator or sponsor (as applicable) must ensure full alignment with all Core Components of the GBP.

Note 1

It is recognised that there is a market of environmental, climate or otherwise themed bonds, in

some cases referred to as “pure play”, issued by organisations that are mainly or entirely involved in environmentally sustainable activities, but that do not follow the four core components of the GBP. In such cases, investors will need to be informed accordingly and care should be taken to not imply GBP features by a Green Bond reference. These organisations are encouraged to adopt where possible the relevant best practice of the GBP (e.g. for reporting) for such existing environmental, climate or otherwise themed bonds, and to align future issues with the GBP.

Note 2

It is recognised that there is a market of bonds with sustainable themes which finance a combination of green and social projects, including those linked to the Sustainable Development Goals (“SDGs”). In some cases, such bonds may be issued by organisations that are mainly or entirely involved in sustainable activities, but their bonds may not align to the four core components of the GBP. In such cases, investors will need to be informed accordingly and care should be taken to not imply GBP (or SBP) features by a Sustainability Bond or SDG reference. These issuing entities are encouraged to adopt, where possible, the relevant best practice of the GBP and SBP (e.g. for reporting) for such existing sustainability, SDG or otherwise themed bonds, and to align future issues with the GBP and SBP.

A mapping of the GBP and SBP to the Sustainable Development Goals (SDGs) is available and aims to provide a broad frame of reference by which issuers, investors and market participants can evaluate the financing objectives of a given Green, Social or Sustainability Bond/Bond Programme against the SDGs. It can be found in the sustainable finance section of ICMA’s website.

Note 3

It is recognised that a number of transactions have been promoted as “Blue Bonds” or similar terminology with the objective of emphasising the importance of the sustainable use of maritime resources and of the promotion of related sustainable economic activities. These efforts are also supported by dedicated market initiatives including official sector support. Such “Blue Bonds” are also Green Bonds as long as they align with the four core components of the GBP.

Note 4

It is recognised that issuers may wish to align their Green Bonds with both the GBP and the SLBP. For the avoidance of doubt, such an approach remains at the discretion of issuers and is neither recommended nor discouraged.

Chapter 3 Sustainability-Linked Bonds

Section 1 Overview of Sustainability-Linked Bonds

1. What are Sustainability-Linked Bonds?[19]

Sustainability-Linked Bonds are a collective term for bonds whose financial and structural characteristics may vary depending on the achievement of a set of objectives related to sustainability/ESG in the future set in advance by an issuer, such as a company or a local government. The issuer will explicitly state (in bond disclosures, etc.) that they will act to achieve sustainability-related objectives within a predetermined time horizon.

Whether the issuer's pre-established sustainability/ESG-related objectives are achieved will be (1) measured by pre-established key performance indicators (KPIs), and (2) evaluated against pre-established targets (SPTs: Sustainability Performance Targets).

In other words, KPIs are indicators to measure the achievement of targets, and SPTs set the level of achievement for the indicator.

2. Benefits of Sustainability-Linked Bonds

(i) Benefits to Issuers

Benefits for issuers of issuing Sustainability-Linked Bonds include the followings:

1) Improve corporate sustainability and dialogue with investors

Working on issuance of Sustainability-Linked Bonds may lead to the development and implementation of sustainability strategy, risk management, and governance systems within the organizations through establishing and aiming at ambitious KPI/SPTs. This also helps issuers satisfy the ESG information disclosure requirement by the Task Force on Climate-related Financial Disclosures (TCFD). These developments will lead to improve the issuer's

[19] The use of proceeds from Sustainability-Linked Bonds is not a determining factor in classifying SDG bonds, as the proceeds are intended to be used for general purposes. It should be noted not to confuse SLBs with Sustainability Bonds, as some bonds may include both use-of-proceed bonds and Sustainability-Linked Bonds.

ESG evaluations in the mid-to-long term and thus possibly enhance its corporate value. Also, if selection of KPI and calibration of SPTs are ambitious and credible enough, that may distinguish evaluations of issuers' sustainability from those of their peers. Moreover, this can lead to strengthening sustainability management beyond the company itself and throughout the supply chain as a result of addressing ESG issues in its supply chain.

Furthermore, dialogue with investors acquired through the issuance of Sustainability-Linked Bonds may lead to the further improvement of corporate sustainability.

2) Incentives in terms of interest rate conditions for improving sustainability performance

Sustainability-Linked Bonds incorporate incentives, such as interest rates that fluctuate in conjunction with SPTs, in order to motivate issuers to improve their sustainability performance. An issuer may be able to raise funds on relatively favorable terms from investors with preference for ESG investments by improving their sustainability management.

3) Strengthen a funding base by acquiring new investors and stabilize funding through dialogue with investors

Diversifying a funding base is an effective means for issuers to reinforce their fundraising strategies. Sustainability-Linked Bond may provide issuers with an opportunity to strengthen their funding base by acquiring new investors who value investments that help to tackle environmental problems such as climate change. In addition, through dialogue with investors, mutual understanding of each other's views and initiatives may be deepened, leading to stable funding.

4) Enhance corporate reputation

By financing through Sustainability-Linked Bonds, issuers can demonstrate commitment to ambitious sustainability goals and their proactive support for environmentally and or socially sustainable economic activities, which can lead to enhance their reputation.

(ii) Benefits to investors

Benefits for investors of investing in Sustainability-Linked Bonds include the followings.

1) Satisfy ESG investment requirements and enhance reputation

Some institutional investors are committed to a certain scale of ESG investment. For such investors, Sustainability-Linked Bonds clearly match this commitment and provide a stable cash flow, unless in the case of defaults. Moreover, investors that do not have such

commitments can demonstrate support for environmentally and or socially sustainable economic activities, potentially enhancing their reputation while obtaining stable cash flows.

2) Achieve both investment returns and environmental and social impacts

By investing in Sustainability-Linked Bonds, investors can help issuers generate environmental and social impacts (listed below in '(iii) Environmental and Social Benefits') that contribute to creating a sustainable society through the provision of funds, while simultaneously gaining returns on their investments.

3) Motivate issuers to improve their sustainability performance

By linking interest rate conditions and sustainability performance, investors may motivate issuers to enhance their sustainability management over the term of the bond, which in turn may lead to the maintenance and improvement of the issuers' corporate value.

4) Enable engagement on ESG matters

Sustainability-Linked Bonds enable investors to engage more effectively with issuers on holistic environmental impacts through evaluating disclosed sustainability information such as environmental impacts and better understanding issuers' sustainability/ESG strategies. Such efforts will lead to a virtuous cycle of enhancing issuers' sustainability and improving investors' mid-to-long term investment returns, which in turn will generate environmental impacts through investment and realise a sustainable society.

(iii) Environmental and Social Benefits

Environmental and social benefits that can be achieved from the issuance of and investments in Sustainability-Linked Bonds include:

1) Contribute to global environmental conservation

The dissemination of Sustainability-Linked Bonds internalizes incentives for issuers to enhance and maintain sustainability management and expands private investments to environmentally and socially sustainable economic activities, thus contributing to the long-term substantial reduction in GHG emissions in Japan and beyond. Moreover, that can mobilize capital to other economic activities besides GHG emissions reduction that lead to the sustainable society, thereby contributing to the prevention of the degradation of natural capital, which is the foundation of long-term profits for companies.

2) Raise individuals' awareness of ESG investments

The dissemination of Sustainability-Linked Bonds will enhance individuals' awareness of ESG investments, which will in turn motivate institutional investors, who are the trustees of

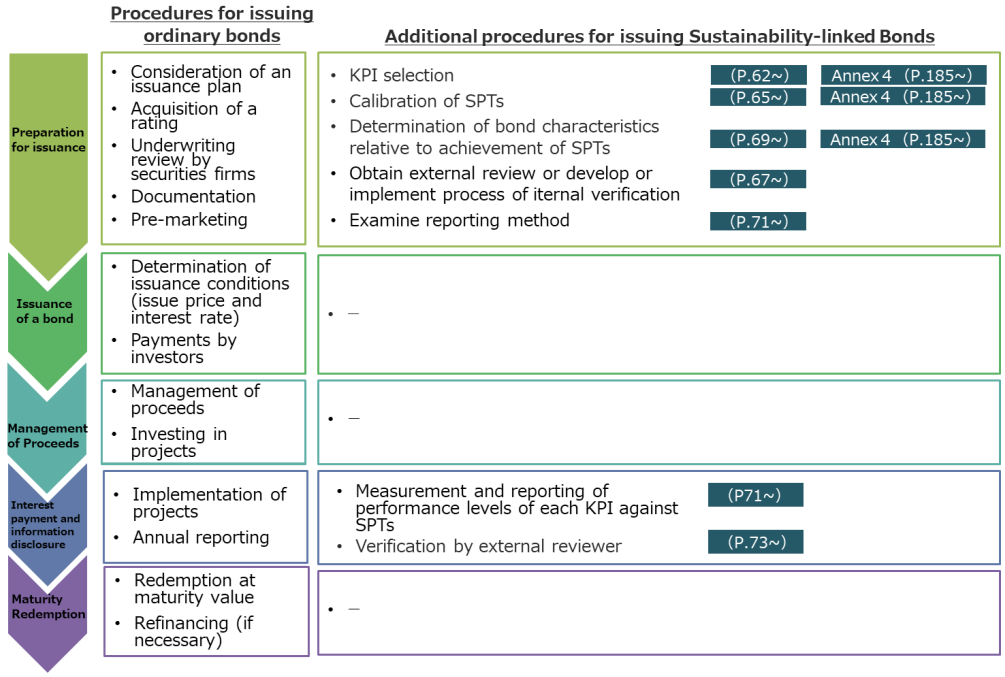
individuals' assets, to actively invest in Sustainability-Linked Bonds. Moreover, it will enhance individuals' interest in the use of own savings and investments, contributing to a greener and more sustainable economy as a whole.

3) Contribute to solving social and economic issues through promotion of Sustainability-Linked Bonds

Promoting projects related to economic activities contributing to the sustainable society through the dissemination of Sustainability-Linked Bonds may lower energy costs, strengthen energy security, reactivate the regional economy, and enhance resilience in the event of disasters.

3. Issuance flow of Sustainability-Lined Bonds

When companies, local governments, etc. issue Sustainability-Linked Bonds, additional procedures are required alongside the normal procedures for issuing corporate bonds, municipal bonds, securitized products, etc. These are illustrated in the figure below.



*The page numbers in the figure refer to the relevant sections of these guidelines.

Section 2 Expected Elements of Sustainability-Linked Bonds and Examples of Possible Approaches

1. Selection of KPIs

【Sustainability-Linked Bond Principles】

The credibility of the Sustainability-Linked Bond market will rest on the selection of one or more KPI(s). It is important to the success of this instrument to avoid the proliferation of KPIs that are not credible. The issuer's sustainability performance is measured using sustainability KPIs that can be external or internal.

First and foremost, the KPIs should be material to the corporate issuer's core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management's control.
For sovereign issuers, the KPIs should be material to the issuer's core sustainability policies and address relevant environmental, social and/or governance objectives.

The KPIs should be:

• relevant, core and material to the corporate issuer's overall business, (or economic, social and governance policies for sovereign issuers) and of high strategic significance to the issuer's current and/or future operations (or sustainable development policies for sovereign issuers);

• consistent with the overall issuer's sustainability strategy or policies but also reflecting the most material strategic dimensions for the issuer; for example, the KPI may be included in or supported by a strategy/policy disclosure, or notably for hard-to-abate sectors, by a transition plan;

• measurable or quantifiable on a consistent methodological basis;

• externally verifiable; and

• able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition.

Issuers are encouraged, when possible, to select KPI(s) that they have already included in their previous reports, such as annual reports, sustainability reports, other non-financial reporting disclosures or episodic reports on Nationally Determined Contributions (NDCs), national emissions inventories/progress, Sustainable Development Goals (SDG) reports, national adaptation plans, national biodiversity strategies, etc. to allow investors to evaluate historical performance of the KPIs selected. In situations where the KPIs have not been previously disclosed, issuers should, to the extent possible, provide historical externally verified KPI values covering at least the previous 3 years.

Care should be taken as technological advancements and the regulatory environment change[20] over time.

It is recommended that issuers communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability strategy, or, for sovereign issuers, their sustainable development policies.

A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter (e.g. the percentage of the issuer's total emissions to which the target is applicable), as well as the calculation methodology (e.g. clear definition of the denominator of intensity-based KPIs), definition of a baseline, where feasible, science-based or benchmarked against an industry standard/recognised international data (e.g. consider SMART philosophy specific, measurable, attainable, relevant and time-bound).

[20] Reference to or inspiration from regulatory standards or taxonomies in the choice of relevant KPIs such as for example: the EU Taxonomy of sustainable activities or the China Green Catalogue, can prove to be useful and relevant. Similarly, reference to goals and objectives set in international agreements such as the Paris Agreement (countries' nationally determined contributions and the 1.5°C or 2°C temperature goal) or the 2030 Agenda on Sustainable Development (Sustainable Development Goals) can prove useful.
Issuers should also note the existing and ongoing work on environmental and social impact metrics by the Principles that may help identify relevant KPIs and calculation methodologies. See notably the Illustrative KPIs Registry published on ICMA's website:(https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/)

Issuers are encouraged to refer to the KPI Registry as sector guidance for the selection of KPI(s) and to the Note to users within the KPI registry for detailed guidance on the key notion of core vs. secondary KPIs supporting KPI selection.

【Guidance】

【General information】

1) For the purpose of this document, the term “sovereign issuers” also includes sub-sovereign issuers (the same applies in the following sections).

【Core KPIs and Secondary KPIs】

2) Issuers are encouraged to select at least one core KPI. Secondary KPIs should in principles be viewed as complimentary to core KPIs. In the event where a core KPI is not feasible and/or applicable to capture the core, material and relevant sustainability issues of the issuer, it can be done through a basket of secondary KPIs that would holistically address the issuer's material issues to become the equivalent of a core KPI.(ICMA (2024.6) ”KPI Registry”)

3) A Core KPI needs to be material, relatively mature and sufficiently holistic and/or able to meaningfully measure performance improvement toward sustainable business operations. It can in principle be used as a standalone KPI in an SLB issuance. Core KPIs have been limited to a couple per sector. (ICMA (2024.6)”KPI Registry”)

4) Secondary KPIs are KPIs that are not material and/or holistic enough to be used as standalone KPIs for SLB issuances. Moreover, in some instances secondary KPIs, while thematically material, may bear certain limitations when it comes to their benchmarkability: such as it does not necessarily follow an externally defined methodology and/or in general lacking comparability against peers and/or externally defined contextual benchmarks. (ICMA (2024.6)”KPI Registry”)

2. Calibration of SPTs

【Sustainability-Linked Bond Principles】

The process for calibration of one or more SPT(s) per KPI is key to the structuring of SLBs since it will be the expression of the level of ambition the issuer is ready to commit to, and thus considers realistic.

SPTs must be set in good faith and the issuer should disclose strategic information, or for sovereign issuers, strategic national development plans or policies, that may decisively impact the achievement of the SPTs.

The SPTs should be ambitious, i.e.:
- represent a material improvement in the respective KPIs and be beyond a “Business as Usual” trajectory;
- where possible be compared to a benchmark or an external reference;
- be consistent with the issuer’s overall strategic sustainability and business strategy in the case of corporate issuers, or sustainable development policies in the case of sovereign issuers; and
- be determined on a predefined timeline, set before (or concurrently with) the issuance of the bond.

The target setting exercise should be based on a combination of benchmarking approaches:
- the issuer’s own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is recommended and when possible forward-looking guidance on the KPI;
- the issuers’ peers, i.e. the SPT’s relative positioning versus its peers’ where available (average performance, best-in-class performance) and comparable, or versus current industry or sector standards (or, for sovereign issuers, comparable countries); and/or
- reference to the science, i.e. systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets), or to official country/regional/international targets (Paris Agreement on Climate Change and net zero goals, Sustainable Development Goals (SDGs),

Kunming-Montreal Global biodiversity framework, etc.) or to recognised Best- Available-Technologies or other proxies to determine relevant targets across environmental and social themes.

【Guidance】

【Definition of Ambition】

1) Specific examples of SPT(s) calibration may include those described in Annex 4.

2) Targets should be set, at a minimum, to be in line with official country/regional/international targets, and when possible, should aim to go beyond such levels. For example, climate-related targets should be set in alignment with 'science-based' scenarios. (ICMA (2024.6) "Guidance Handbook")

【Sustainability-Linked Bond Principles】

Disclosures on target setting should make clear reference to:

- the timelines for the target achievement, including the target observation date(s)/ period(s), the trigger event(s) and the frequency of SPTs;
- where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used (including date/ period);
- where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place; 3 The recourse to ex-ante Second Party Opinion is especially recommended where benchmarks are absent or lack clear performance thresholds pertinent to the issuer.
- where possible and taking competition or confidentiality considerations into account, how the issuers intend to reach such SPTs, (e.g. by describing their ESG strategy, supporting ESG governance and investments, and their operating strategy, i.e. through highlighting the key levers/type of actions that are expected to drive the performance towards the SPTs as well as their expected respective contribution, in quantitative terms wherever possible or, for sovereign issuers, describing their sustainable development policies , (tagged) budget/NDC plans); and
- any other key factors beyond the issuer's direct control that may affect the achievement of the SPT(s).

Issuers are encouraged to position this information within the context of the issuer's overarching objectives, strategy, policy or, processes relating to ESG.

【Guidance】

【Disclosures on SPTs】

3) In the context of enhancing the credibility of the Sustainability-Linked Bonds, it is recommended that issuers refer to measures and initiatives they envisage for achieving the predefined SPTs, while taking competition and confidentiality considerations etc. into account.

【Sustainability-Linked Bond Principles】

It is recommended that, in connection with the issuance of a Sustainability-Linked Bond, issuers appoint (an) external review provider(s) to confirm the alignment of their bond with the five core components of the SLBP (such as a Second Party Opinion).

In their pre-issuance Second Party Opinion, external reviewers are encouraged[21] to assess the relevance, robustness and reliability of selected KPIs, the rationale and level of ambition of the proposed SPTs, the relevance and reliability of selected benchmarks and baselines, and the credibility of the strategy and/or policies outlined to achieve them, based on scenario analyses, where relevant. Post issuance, in case of any material change to perimeter/KPI methodology/SPT(s) calibration, issuers are encouraged to ask external reviewers to assess any of these changes.

In cases where no Second Party Opinion is sought, it is recommended that issuers demonstrate or develop the internal organisational expertise to verify their methodologies. Issuers are recommended to thoroughly document any such expertise, including the related internal processes and expertise of their staff. This documentation should be communicated to investors.

The SLBP encourage external reviewers to disclose their credentials and relevant expertise and

[21] The recourse to ex-ante Second Party Opinion is especially recommended where benchmarks are absent or lack clear performance thresholds pertinent to the issuer.

communicate clearly the scope of the review(s) conducted.

Voluntary Guidelines for External Reviews, which have been developed by the Principles to promote best practice, can prove to be a useful reference. These voluntary Guidelines are a market-based initiative to provide information and transparency on the external review processes for issuers, underwriters, investors, other stakeholders and external reviewers themselves.

3. Bond Characteristics

【Sustainability-Linked Bond Principles】

The cornerstone of an SLB is that the bond's financial and/or structural characteristics can vary depending on whether the selected KPI(s) reach (or not) the predefined SPT(s), i.e. the SLB will need to include a financial and/or structural impact involving trigger event(s).

The potential variation of the coupon is the most common example, but it is also possible to consider the variation of other SLB's financial and/or structural characteristics.

It is recommended that the variation of the bond financial and/ or structural characteristics be commensurate and meaningful relative to the issuer's original bond financial characteristics.

【Guidance】

【Link with interest rate conditions, etc.】

1) A Sustainability-Linked Bond aims to improve the sustainability of an issuer.

2) Hence, it is necessary that the variation of the bond financial and/or structural characteristics serve as a sufficient incentive for issuers to improve their own sustainability.

3) For factors investors, external reviewers, and other market participants may consider when evaluating whether the bond's financial and/or structural characteristics sufficiently provide incentive mechanisms, section 4.4.1 of the "Guidance Handbook (ICMA (2024.6))" is available for reference.

＜Examples of characteristics to be linked＞

* Possible examples are not limited to the following:

- The interest rate will be lowered if the issuer achieves the pre-set SPTs, or raised if it does not achieve them.
- The redemption price will be raised if the issuer fails to achieve the SPTs.
- An early redemption option will be given if the issuer achieves SPTs.
- If the issuer fails to achieve the SPTs, it will donate, to initiatives that contribute to improving social sustainability, the equivalent of an interest rate that is to be raised when the issuer fails to achieve the SPTs or that is to be lowered when the issuer achieves them.

*In the above donation case, it is also important to ensure transparency, such as by confirming whether the recipient's activities generate positive environmental and social impact. In addition, contractual arrangements to ensure the effectiveness of the donation are also important.

* For further information on the characteristics to be linked and points to note, section 4.4.2 of the "Guidance Handbook (ICMA (2024.6))" is available for reference.

【Sustainability-Linked Bond Principles】

The KPI(s) definition and SPT(s) (including calculation methodologies) and the potential variation of the SLB's financial and/or structural characteristics are a necessary element of the bond documentation.

Any fallback mechanisms in the case that the SPTs cannot be calculated or observed in a satisfactory manner should be explained. Issuers may also consider including, where needed, language in the bond documentation to take into consideration potential exceptional events (such as significant change in perimeters through material M&A activities for corporate issuers) or extreme events, including drastic changes in the regulatory or technical environment that could substantially impact the calculation of the KPI, the restatement of the SPT, and/or proforma adjustments of baselines or KPI scope.

Please note that SLBs may involve information that could be considered market sensitive and that such information, and the handling of such information, should be treated appropriately.

4. Reporting

【Sustainability-Linked Bond Principles】

Issuers of SLBs should publish, and keep readily available and easily accessible:

- up-to-date information on the performance of the selected KPI(s), including baselines where relevant;
- a verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the bond's financial and/or structural characteristics; and
- any information enabling investors to monitor the level of ambition of the SPTs (e.g. any update in the issuers sustainability strategy or on the related KPI/ESG governance or any update in the sovereign issuer's strategic development plans and/or policies, and more generally any information relevant to the analysis of the KPIs and SPTs).

This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB's financial and/or structural characteristics.

If quantitative data is not available every year, sovereign issuers are encouraged to publish a report containing an explanation of the main factors behind the evolution of each KPI.

Since a number of transparency measures are specified throughout the document and for the sake of clarity, a checklist of recommended or necessary pre and post issuance disclosures is provided in Appendix II.

【Guidance】

【General information】

1) For an issuer to claim financing through Sustainability-Linked Bonds, and to gain public recognition and acceptance as such, it will be necessary to ensure transparency. For this reason, issuers should publically disclose relevant information when stating that they use

Sustainability-Linked Bonds. Disclosure of such information may be included in the issuer's annual report, CSR report, environmental report, sustainability report, integrated report, etc., or it may be posted on the issuer's website, etc.

5. Verification

【Sustainability-Linked Bond Principles】

Issuers should seek an independent and external verification (for example limited or reasonable assurance) of their performance against each SPT for each KPI, by a qualified external reviewer with relevant expertise[22], such as an auditor or a sustainability consultant, once a year, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB financial and/or structural characteristics, until after the last SPT trigger event of the bond has been reached.

The verification of the performance against the SPTs should be made publicly available.

As opposed to the pre-issuance external review such as a Second Party Opinion, which is recommended, post issuance verification, is a necessary element of the SLBP.

【Guidance】

【General information】

1) External reviewers may include rating agencies, etc.

2) The qualification requirements for external reviewer, which conduct verification, are essentially the same as those required of external reviewers for Green Bond Guidelines. On the other hand, it should be noted that the external review for appropriateness of KPIs and/or SPTs described in “2. Calibration of SPT” and external verification described in “5. Verification” may address different content, and thus may require different expertise.

3) On the premise that SPTs meet the requirements above, there may be cases where verification for each SPT might not require additional steps to be taken by the parties (for example, where the information is already subject to annual verification by an independent and external organisation, such as a regulator).

[22] Please see Voluntary Guidelines for External Reviews developed by the Principles to promote best practice.

Chapter 4 Expected Procedures for Investors

A characteristic of Green Bonds is that the bond proceeds are limited to Green Projects, that will have environmental benefits. Annex 1 of the Guidelines sets out judgement criteria to determine the project that can be classified as Green Projects with explicit environmental benefits. The table in Annex 1 shows some illustrative examples of Green Projects.

Furthermore, Sustainability-Linked Bonds are characterized by their linkage between the issuer's sophistication of sustainability management and the terms of the corporate finance. Some examples are given in Annex 4 of the Guidelines, showing SPTs that are ambitious and meaningful in terms of the materiality of the business of the subject issuer.

It should be noted that these are just possible examples, and the final decision on whether to invest in Green Bonds or Sustainability-Linked Bonds is left to the investors. Therefore, the role of investors will be extremely important for the sound development of the Green Bond and Sustainability-Linked Bond market.

First, in order for investments to generate environmental benefits and positive impacts, it is important for investors to have their own intentions in investment and to embody these intentions in their own strategies. Investors' manifestation of their strategies aiming for positive impacts will be a driver of this market.

It is also recommended that, when making investment decisions on Green Bonds, investors appropriately assess whether the project for which the proceeds of the relevant Green Bond are to be used has any environmental benefits, the magnitude of its impact and other relevant factors. With regard to Sustainability-Linked Bonds, it is recommended that appropriate assessments are made regarding whether the levels of SPTs are ambitious and meaningful enough, and the magnitude of their impacts on sustainability.

When doing so, investors are recommended to note that Annex 1 and Annex 4 are just examples and that they should make decisions on a case-by-case basis even for the kinds of projects included in those Annexes. Each decision should be based on factors such as the conditions surrounding each project, negative impact if any, as well as international trends, through the explanation and self-evaluation by the issuer or external reviews.

Where an external review is provided, investors are recommended to carefully consider the documents concerning the external review results and to make final investment decisions based on their own appropriate evaluation of the relevant Green Bonds or

Sustainability-Linked Bonds without solely relying on the external review. Furthermore, after investing in Green Bonds or Sustainability-Linked Bonds, investors are recommended to continue close communication with issuers and encourage disclosure if necessary, and to appropriately monitor, how the issuers has managed of the proceeds, whether the expected impact has been achieved, and if the situation has changed.

To achieve the above, investors need to have sufficient ability to make appropriate decisions. Accordingly, it is recommended that investors have considerable insights regarding sustainable development, accumulate knowledge on Green Projects and sustainable management, and also pay full attention to international trends.

These are necessary for institutional investors, etc. to gain support from society as financial institutions executing ESG investments, which leads to the sound development of green finance and sustainable finance, as well as to the establishing of a sustainable society.

Chapter 5 Revision of the Guidelines

Given the objective to further develop the markets for Green Bonds and Sustainability-Linked Bonds, these Guidelines will be revised in response to the growth of the Japanese market, rapidly changing international trends and any other changes that may occur.

Green Loan and Sustainability-Linked Loan Guidelines 2024

Established in March 2020

Revised in July 2022(Annex 1 revised in March 2024)

Revised in November 2024

Ministry of the Environment, Japan

Disclaimer

The Green Bond Guidelines (hereinafter “the Guidelines”) are legally non-binding and no legal penalties will be imposed even if a certain action does not comply with the elements (including elements described with the word “should”) described in the Guidelines. However, it is necessary to note that if a certain action violates any laws or regulations, legal penalties may be imposed based on said laws or regulations, even though the action complies with the elements described in the Guidelines.

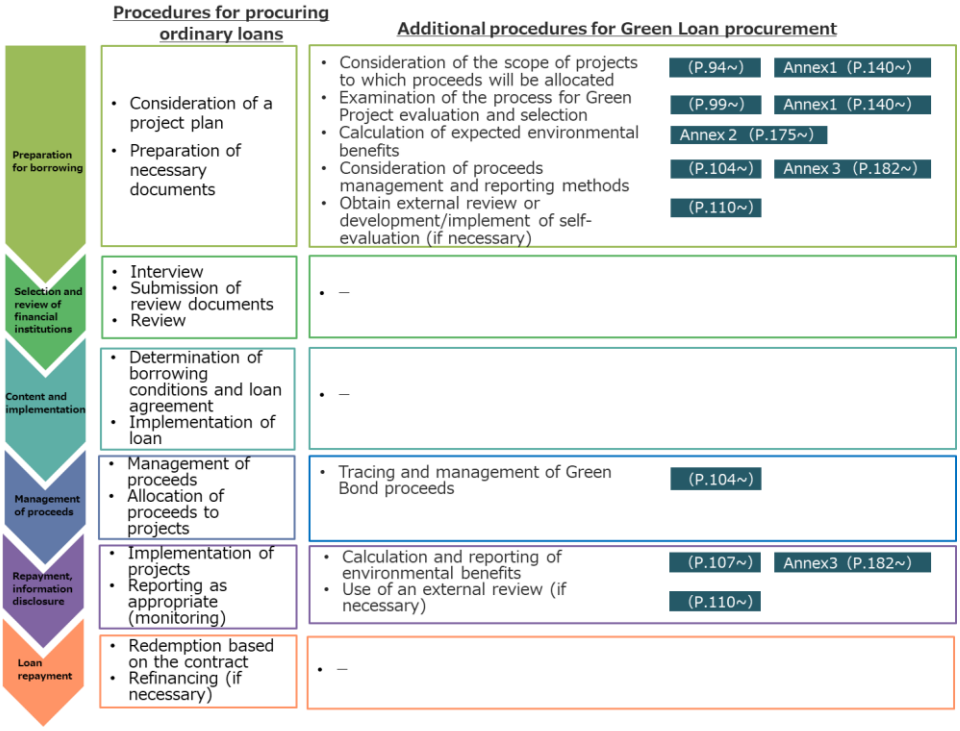
The Guidelines do not constitute advice on decisions regarding investments in specific Green Bonds, other securities, or financial matters, or recommendations to purchase, sell, or hold specific Green Bonds or other securities.

The Guidelines do not guarantee that the projects to which proceeds from specific Green Bonds, etc. are allocated will produce the intended environmental benefits, and assume no responsibility whether the projects realise their environmental benefits or not.

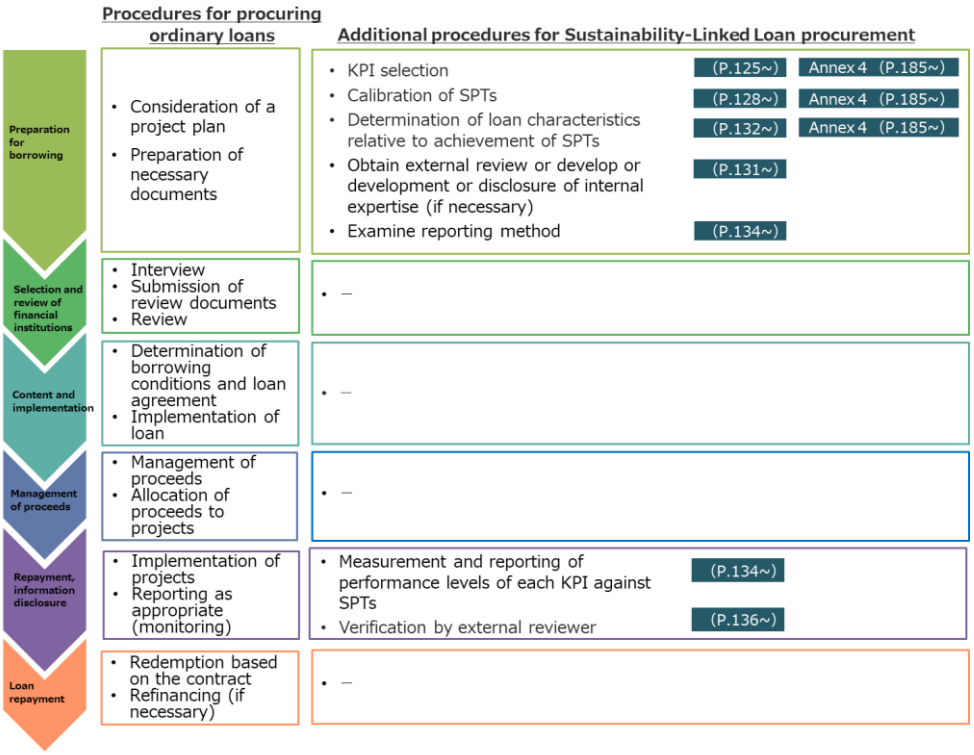
Those who issue, purchase, sell, or hold specific Green Bonds or other securities shall do so at their own risk.

The Ministry of the Environment, Japan will not be liable in any way for any loss, damage, or expense of any kind incurred as a result of, or in connection with, the use of the information presented in the Guidelines, and/or caused by any modifications or the abolition of the Guidelines.

Green Loan and Sustainability-Linked Loan Procurement Flow



*The page numbers in the figure refer to the relevant sections of these guidelines.



*The page numbers in the figure refer to the relevant sections of these guidelines.

Chapter 1 Introduction

1. Purpose of the Guidelines

At COP28 in Dubai, UAE, in November 2023, a global stocktake was held for the first time, emphasising the need for urgent action to achieve the 1.5°C goal in the Paris Agreement, and recognising the need to peak global emissions by 2025. For a substantial early reduction in greenhouse gas (GHG) emissions and structural changes towards a decarbonised economy and society, it is necessary to mobilize large amounts of private investments towards Green Projects, such as renewable energy projects.

During COP26 in 2021, GFANZ[23], a global coalition of financial institutions aiming to achieve net zero, was officially established and its Japan Chapter was established in May 2023 to support the decarbonisation needed to achieve Nationally Determined Contributions (NDCs). In addition, there has been further acceleration of the global movements from the financial side to encourage companies to decarbonise; for instance in June 2023, the International Sustainability Standards Board (ISSB) published the first global sustainability disclosure standard, including climate change.

In addition, heavy rainfall events have become more frequent in recent years, with climate change identified as a contributing factor in weather-related disasters that have caused significant damages. As global warming intensifies, it is predicted that the frequency and intensity of extreme events such as heavy rainfall will increase and that the impacts will increase in various sectors such as agriculture, forestry, fisheries, and health. In parallel to this, the importance of adaptation projects that avoid or mitigate the risks of climate change. At the same time, the G7 Hiroshima Leaders' Communiqué and G7 Sapporo Climate, Energy and Environment Ministers' Communiqué state that in the face of the triple global crisis of climate change, biodiversity loss and pollution, we will work together to achieve transformation of our economies to enable net zero (decarbonisation), circular, pollution-free, and nature positive and commit to leveraging synergies, recognising the interdependence of issues. It is essential to address, along with climate change, conservation of biodiversity, prevention of air and marine pollution, and resource recycling including measures against plastic waste, as the interlinkage between climate change and biodiversity loss. The role of private capital is also important for integrated initiatives in

[23] Glasgow Financial Alliance for Net Zero

these fields.

In addition to the sustainable finance frameworks such as TCFD[24], which has taken the lead on decarbonisation, the Taskforce on Nature-related Financial Disclosures (TNFD) was launched in 2021 and discussions are a disclosure framework was published in September 2023. Not only business entities but also investors and financial institutions came to regard the sustainable use of natural capital as an element of business, as all business activities of companies affect and depend on natural capital.

Japan has pledged to become carbon neutral by 2050, and has set an ambitious target aligned with the 2050 goal: a 46% reduction in GHG emissions by 2030 from 2013 levels, while striving for a 50% reduction. To achieve these goals, not only the transformation in the energy distribution structure but also bold actions across local communities, lifestyles, and industrial structures are necessary. In particular, in order to accelerate decarbonisation in regions towards carbon neutrality, the Decarbonization Leading Areas have been selected to simultaneously achieve carbon neutrality and solve regional issues by 2030, without waiting for 2050. In addition, in October 2022, Japan Green Investment Corp. for Carbon Neutrality (JICN) was established to provide investment and financing (risk money supply) to attract various projects that contribute to decarbonisation. In this way, it is also important to strengthen financial flow for decarbonisation in both the public and private sectors.

The Equator Principles were formulated in 2003, aiming to confirm whether the large-scale development and infrastructure construction projects, for which loans were provided, appropriately took into account environmental and social considerations. Subsequently, several financial approaches and instruments, such as Green Bonds, have been developed in order to mobilize private capital to Green Projects, including projects contributing to the reduction of greenhouse gas (GHG) emissions and the prevention of natural capital deterioration.

In recent years, after the initial publication of the Green Loan Principles[25] (hereinafter referred to as “GLP”) in March 2018, there has been a worldwide increase in Green Loans for companies looking to raise funds required for Green Projects. Green Loans started to be used in Japan, but they are not yet sufficiently utilized compared with other countries, given the necessity to introduce large amounts of private funds to achieve the above-mentioned international environmental goals.

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[24] Task force on Climate-related Financial Disclosures

[25] APLMA, LMA, LSTA (February 2023) Green Loan Principles
https://www.lsta.org/content/guidance-on-green-loan-principles-glp/
The Green Loan Principles (GLP) comprise voluntary recommended guidelines on borrowing Green Loans, published by Asia Pacific Loan Market Association (APLMA), Loan Market Association (LMA), and Loan Syndications & Trading Association (LSTA). GLP are recognised as international standards on Green Loans.

In addition, the Sustainability-Linked Loan Principles[26] (hereinafter referred to as "SLLP") were formulated in March 2019. The SLLP provide a framework that ties improvement of corporate sustainability to loan terms (such as margin). It is believed that this framework can also become an effective tool to introduce private funds for business activities that contribute to the reduction of GHG emissions and prevention of natural capital deterioration in Japan, where corporate finance is dominant.

Since then, the GLP and the SLLP have been updated in line with international debate and particularly the framework of the SLLP has been adjusted in comparison with the Sustainability-Linked Bond Principles, which have similar characteristics.

Considering the above, the purpose of these "Green Loan and Sustainability-Linked Loan Guidelines" (hereinafter "the Guidelines") is to increase the utilization of Green Loans and Sustainability-Linked Loans in Japan. To maintain the credibility of the green characteristics, the Guidelines seek to prevent "green wash" (proclaiming to be "green" despite having no environmental benefits or not allocating proceeds[27] appropriately to Green Projects).

The Guidelines have aligned with the GLP and SLLP, which are widely accepted in international Green Loan and Sustainability-Linked Loan markets, provide borrowers, lenders, and other market participants with illustrative examples of specific approaches and interpretations tailored to the Japanese market for their reference in decision-making regarding Green Loans and Sustainability-Linked Loans. The Guidelines aim to enhance the credibility of the green eligibility of such loans as well as alleviate the costs and administrative burdens for borrowers, thereby spurring the Green Loan and Sustainability-Linked Loan market in Japan.

It should be noted that the Guidelines are not legally binding and thus no legal penalties will be imposed if a certain action does not comply with the elements described in the Guidelines (including elements described with the word "should"). However, it is necessary to note that, if a certain action violates any laws and regulations, legal penalties may be imposed.

Furthermore, these Guidelines were developed in 2020 and have been revised twice in 2022 and 2024, in light of revisions to the international principles as well as market and domestic policy trends, thus it is recommended to make sure to refer to the latest version.

For reference, examples of green loan and other issuances, the latest trends and other related measures are available on the Green Finance Portal.
(https://greenfinanceportal.env.go.jp/en/)

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[26] APLMA, LMA, LSTA, (March 2022) Sustainability-Linked Loan Principles
https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/
Sustainability-Linked Loan Principles (SLLP) comprise voluntary recommended guidelines on borrowing Sustainability-Linked Loans, published by Asia Pacific Loan Market Association (APLMA), Loan Market Association (LMA), and Loan Syndications & Trading Association (LSTA). SLLP are recognised as international standards on sustainability-linked loans.

[27] "Proceeds" in the Guidelines means the "net proceeds" after procurement fees have been deducted.

2. Measures taken so far in Japan for ESG loans focused on environmental factors

ESG loans refer to financing that takes into consideration environmental (E), social (S), and governance (G) factors. For example, such financing includes loans based on project feasibility evaluations that take into consideration ESG factors from a financing standpoint, as well as financing for projects that have impacts on the environment and society (environmental and social projects), such as renewable energy projects, energy-saving projects, and recycling projects. Both Green Loans and Sustainability-Linked Loans are considered as ESG loans.

In Japan, the Development Bank of Japan Inc. provided the first environmentally-rated loan ahead of other countries in 2004. Since then, the offering of environmentally-rated loan programs by Japanese financial institutions has expanded to a certain extent. In an environmentally-rated loan program, a financial institution appropriately evaluates the borrower company's efforts in environmental management and environment-conscious activities upon providing loans, and based on that evaluation, it sets the financing conditions, such as phased changes in interest rates, and then decides on the provision of the loan.

In addition to the definition of ESG loan noted at the beginning of this guideline, recommendations made by the ESG Finance Roundtable in 2018 included a proposal on the importance of addressing ESG loans in indirect finance.

Subsequently, in addition to environmentally-rated loans, ESG regional financing has also been gaining momentum, aiming simultaneously to solve regional socio-economic and environmental issues and form sustainable local communities. ESG regional financing refers to activities of regional financial institutions, such as providing borrowers with necessary support, knowledge, or financing that takes into consideration ESG factors corresponding to regional characteristics. In particular, the review process takes into consideration ESG factors in project feasibility evaluations for providing financing.

Japan has recently seen an increase in cases where Green Loans are provided to finance Green Projects based on GLP, and/or cases where Sustainability-Linked Loans are offered based on the SLLP.

ESG lending is a concept that requires financial institutions to take ESG factors into account upon providing funds. Furthermore, depending on the main purpose of the economic activities for which the funds are provided, such financing may be referred to in any of the following ways: (i) climate finance for achieving the target set by, for instance, the

Paris Agreement; (ii) climate change adaptation finance; (iii) biodiversity finance for preservation of biodiversity; (iv) circular economy finance for building a sound material-cycle society; (v) green finance for overall environmental measures; (vi) social finance for solutions to overall social issues; (vii) regional revitalization SDG finance for regional revitalization; (viii) SDG finance for achieving SDGs by the United Nations; or (ix) sustainable finance for the formulation of a sustainable society. Furthermore, the Japanese market has recently seen a rise in positive impact finance practices, whereby lenders clearly intend to generate positive social and/or environmental impact and comprehensively evaluate the positive and negative impacts of the borrower's business.

3. Basic Concepts of the Guidelines

(1) Green Loans

Green Loans are to be developed through interactions based on sufficient information between borrowers, clearly declaring that they will allocate the proceeds only to Green Projects, and lenders who want to finance Green Projects of their choice. The final decision on how to evaluate the appropriateness of the borrower's approach to the relevant Green Loan, and whether a Green Loan should be provided at all, is left to those parties involved in the loan.

It is helpful to organize the expected elements of Green Loans in the Guidelines to form the foundation for interactions between borrowers and lenders and serve as a tool for assuring stakeholders that the finance/investment is for Green Projects.

Additionally, it is important for borrowers and lenders that the credibility of the green eligibility of Green Loans is maintained within the market and society. In particular, preventing 'greenwashing' through the use of a Green Loan product is imperative.

Based on the above, the Guidelines have been developed in alignment with the internationally accepted GLP (as of February 2023). The Guidelines recognise that a Green Loan that align with its four components: (1) Use of Proceeds, (2) Process for Project Evaluation and Selection, (3) Management of Proceeds, and (4) Reporting, all of which are described with the word "should" in Chapter 2 of the Guidelines, can be internationally accepted as Green Loans[28].

(2) Sustainability-Linked Loans

Like Green Loans described above, Sustainability-Linked Loans are also to be developed through interactions based on sufficient information between borrowers and lenders. The

[28] However, it is necessary to keep in mind that an individual Green Loan is to be evaluated and selected by each lender and other related participants based on their own ways of thinking.

final decision on how to evaluate the appropriateness of the borrower's approach to the relevant Sustainability-Linked Loan, and whether a Sustainability-Linked Loan should be provided, is left to those parties involved in the loan.

The Guidelines have been developed in alignment with the SLLP (as of February 2023). In particular, the Guidelines recognise that a Sustainability-Linked Loan is expected to be aligned with five components: (1) Selection of KPIs, (2) Calibration of SPTs, (3) Loan Characteristics, (4) Reporting, and (5) Verification. Loans that address all of these components described with the word "must" or "should" in Chapter 3 of the Guidelines can be internationally accepted as Sustainability-Linked Loans.

(3) Common items

As for the items whose interpretation varies among borrowers, lenders, and other participants, it is important to establish a mechanism whereby borrowers disclose how they address them and lenders or other participants evaluate its appropriateness, except for responses that are clearly inappropriate, rather than uniformly excluding them, and the market participants accumulate and make the most of knowledge. This mechanism will improve market discipline to prevent the risk of greenwashing while securing the diversity of borrowers' approaches to each item.

On an international basis, various countries and jurisdictions try to classify environmentally sustainable economic activities in order to identify eligible recipients of investments and loans in sustainable finance. The Guidelines have the same objective, in a sense that it clarifies and provides in Annex 1 the guidance on the definition of environmental aspects, i.e., green eligibility, as a reference for assessment in the market.

With regard to the use of proceeds of Green Loans in Japan, it is also important to continue to take necessary measures, monitoring the international collaborative efforts and improving international comparability and interoperability.

These Guidelines focus on the green eligibility of Green Loans and the sustainability of Sustainability-Linked Loans, and therefore do not cover their characteristics and inherent risks as loans. It is important to note that Green Loans and Sustainability-Linked Loans, even if aligned with the Guidelines, have credit and other risks, like ordinary loans.

4. Relations with Related Financial Approaches and Instruments

Climate transition finance

Climate transition finance is a financial approach to support GHG emissions reduction initiatives of companies that take action to reduce emissions based on their long-term

strategy for transition to a decarbonised society[29]. This finance is for companies committed to ambitious efforts for the future as they are required to have explicit strategies to achieve long-term goals consistent with the Paris Agreement. Climate transition finance is therefore an important tool for realising a decarbonised society.

At the same time, climate transition finance is determined holistically – not just by the use of proceeds or the KPIs rather by, the credibility of the borrower's climate transition strategy and execution. Borrowers can label their loans as climate transition finance when the loans meet the four key elements[30] of climate transition finance as well as the criteria for Green Loans or Sustainability-Linked Loans set forth in the Guidelines for financing processes.

With regard to fundraising, the choice of the label should be determined by the borrower, based on their own business strategy, financial strategy, sustainability/ESG strategy in the market. Meanwhile, borrowers can choose to label their loans as climate transition finance for climate change mitigation projects by referencing the four key elements of Climate Transition Finance, in case they disclose their climate transition strategies in line with Paris Agreement.

5. Structure of the Guidelines

Section 1 of Chapter 2 provides an overview of Green Loans. It also describes the benefits of financing using Green Loans and providing such loans, as a reference for both borrowers and lenders who are considering entering into Green Loans.

Section 2 of Chapter 2 describes expected elements of Green Loans and examples of possible approaches.

Section 1 of Chapter 3 provides an overview, and the significance, of Sustainability-Linked Loans.

Section 2 of Chapter 3 describes expected elements of Sustainability-Linked Loans and examples of possible concrete approaches. The precision of wording in Chapters 2 and 3 is as follows:

(i) Sentences containing the word "must" are elements that must be in place for loans labelled as "green" or "sustainability-linked" in these Guidelines.

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[29] See the "Basic Guidelines on Climate Transition Finance" by the Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment, Japan. https://www.meti.go.jp/english/press/2021/pdf/0507_001a.pdf

[30] In the "Climate Transition Finance Handbook" and the "Basic Guidelines on Climate Transition Finance," four elements (Element 1: Borrower's climate transition strategy and governance; Element 2: Business model environmental materiality; Element 3: Science-based climate transition strategy that includes targets and pathways; Element 4: Implementation transparency) are recommended to be disclosed by the borrower.

(ii) Sentences containing the word “should” indicate essential elements for loans labelled as “green” or “sustainability-linked”.

(iii) Sentences containing the word “recommend” indicate elements which are desirable and strongly considered better to adopt, but not requisite elements for loans labeled as “green” or “sustainability-linked”.

(iv) Sentences containing the phrase “encourage” indicate elements that are considered better to adopt, but not requisite elements for bonds labeled as “green” or “sustainability-linked” loans.

(v) Sentences containing the phrase “to be considered” are examples of possible approaches and interpretations related to Green Loans or Sustainability-Linked Loans, although they are not requisite for labels as “green” or “sustainability-linked”.

Chapter 4 describes expected procedures for lenders.

6. How to Cite these Guidelines

When citing these Guidelines, they should be referred to as the “Green Loan Guidelines 2024” when specifically referencing the Green Loan sections, and as the “Sustainability-Linked Loan Guidelines 2024” when specifically referencing the Sustainability-Linked Loan sections.

Chapter 2 Green Loans

Section 1 Overview of Green Loans

1. Definition of Green Loans

Green Loans are loans used by companies, local governments, or other organizations to raise funds for domestic and overseas Green Projects. Specifically, these loans have the following features: (i) the proceeds are allocated exclusively to Green Projects, (ii) the proceeds are tracked and managed in a reliable manner, and (iii) transparency is ensured by reporting following financing.

Those taking out Green Loans (borrowers) include: (i) corporations that raise funds for Green Projects (including Special Purpose Companies ("SPCs")[31] that only handle Green Projects), (ii) financial institutions that raise investment funds and loans for Green Projects, and (iii) local governments that raise funds for Green Projects.

Those providing Green Loans (lenders) include, amongst others, financial institutions that commit to ESG loans.

Diverse lending instruments including loans (such as term loans) can be considered for Green Loans.

[31] A SPC (Special Purpose Company) is a corporation established for the limited purpose of acquisition of and financing backed by specific assets (real estate, bonds).

2. Benefits of Green Loans

(i) Benefits to Borrowers

The benefits for borrowers of Green Loans are as follows:

1) Improve corporate sustainability

Working on Green Loans may lead to the development and implementation of sustainability strategy, risk management, and governance systems within the organizations. This also helps to satisfy the sustainability information disclosure requirement. Furthermore, it can be considered to improve the medium- and long-term ESG assessment of the borrower, which will in turn help raise their corporate value.

2) Enhance corporate reputation by promoting Green Projects

Since the use of Green Loan proceeds is limited to Green Projects, if borrowers, such as companies or local governments, use Green Loans, the proceeds are allocated to Green Projects, leading to promoting such projects. Therefore, borrowers can demonstrate that they are actively promoting Green Projects by using Green Loans, which can enhance their reputation.

3) Strengthen a funding base by building relationships with new lenders

Diversifying a funding base is an effective means for borrowers to reinforce their fundraising strategy. Using a Green Loan and disclosing the relevant information offers borrowers the opportunity to consolidate their funding base by building new relationships with financial institutions which value ESG.

4) Possibility of gaining pricing benefits

If a company raises funds through Green Loans or similar loans that use cashflow generated from a renewable energy or other business with strong business viability, it may be able to raise funds on relatively favorable terms from financial institutions who are well versed in evaluating the feasibility of such businesses.

(ii) Benefits to Lenders

The benefits for lenders of Green Loans are as follows:

1) Satisfy ESG finance requirements and enhance reputation

Some lenders are committed to a certain scale of ESG finance. For them, Green Loans clearly match this commitment and can provide a stable cash flow unless in the case of defaults. Moreover, lenders that do not have such commitments can demonstrate that they actively engage in Green Loans, support Green Projects, and thereby enhance their reputation, while obtaining stable cash flows unless in the case of defaults.

2) Achieve both financial returns and environmental and social benefits through lending

By providing Green Loans, lenders can help borrowers generate environmental and social benefits (listed below in (iii)) that contribute to creating a sustainable society, while simultaneously gaining financial returns.

3) Enable support directly Green Projects

In light of the global quest for lower GHG emissions based on the Paris Agreement, it is expected that the demand for investment in Green Projects related to renewable energy and energy efficiency will increase substantially. Green Loans offer lenders the opportunity to support directly such projects.

4) Enhance corporate sustainability through deeper engagement with borrowers

Green Loans enable lenders to engage effectively with borrowers on holistic environmental impacts, including positive environmental impacts and associated negative environmental and social impacts, through evaluating disclosed sustainability information.

Such efforts will lead lenders to have deep conversations on business issues with borrowers, which may contribute to offering more effective solutions that satisfy borrower's needs and helping borrowers acquire new business opportunities. That may also improve borrowers' corporate sustainability and further lead to enhancing their corporate value.

(iii) Environmental and Social Benefits

Environmental and social benefits that can be generated from Green Loans include the followings:

1) Contribute to global environmental conservation

An increase in Green Loans is expected to increase private funds in Green Projects, such as renewable energy and energy efficiency projects, and contribute to the long-term substantial reduction of GHG emissions in Japan and beyond. Moreover, Green Loans can mobilize capital in Green Projects beyond those contributing to the reduction of GHG emissions will contribute to the prevention of the degradation of natural capital, which is the foundation of long-term profits for companies.

2) Raise the awareness of individuals who deposit with financial institutions that provide Green Loans

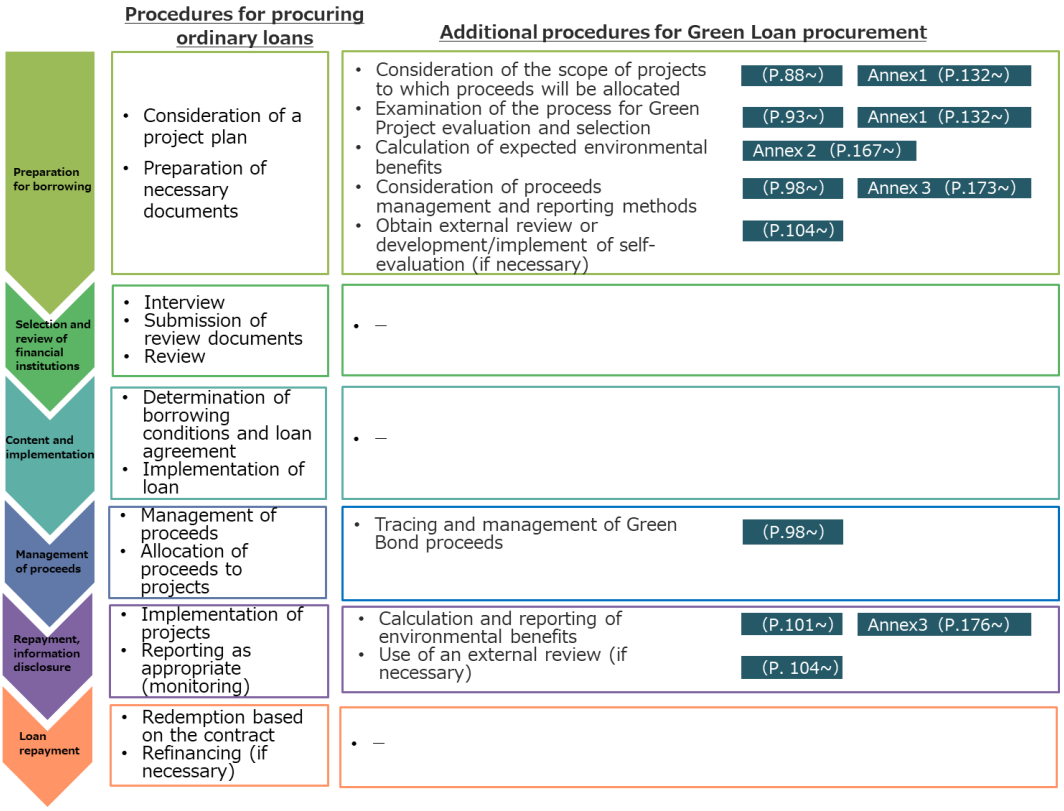
An increase in Green Loans and Green Deposit will enhance individual awareness of Green Loans, which will in turn motivate individuals actively to deposit with financial institutions that provide such loans. Raising such awareness will motivate financial institutions who are the holders of individuals' assets, to actively provide Green Loans.

3) Contribute to resolving social and economic issues through the promotion of Green Projects

Promoting Green Projects through the use of Green Loans can lower energy costs, strengthen energy security, revitalize the regional economy, and enhance resilience in the event of disasters.

3. Green Loan Flow

Companies, local governments, or other organizations that take out Green Loans need to follow extra procedures, in addition to the procedures required for taking out ordinary loans. These procedures are illustrated below:



*The page numbers in the figure refer to the relevant sections of these guidelines.

Section 2 Expected Elements of Green Loans and Examples of Possible Approaches

1. Use of Proceeds

【Green Loan Principles】

The fundamental determinant of a green loan is the utilization of the loan proceeds for Green Projects (including other related and supporting expenditures, including R&D), which should be appropriately described in the finance documents, and, if applicable, marketing materials for the financing and/or a green loan framework. All designated Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the borrower.

【Guidance】

[Use of proceeds]

1) Green Projects may have associated negative environmental and/or social impacts on the environment, in addition to their intended environmental benefits. Green Projects that provide clear environmental benefits described above are projects that the borrower considers that such negative impacts are not excessive in comparison to the environmental benefits.

2) Annex 1 shows some of the typical examples of such negative impacts.

【Green Loan Principles】

Where funds are to be used, in whole or part, for refinancing, it is recommended that borrowers provide an estimate of the share of financing versus refinancing. Where appropriate, they should also clarify which investments or project portfolios may be refinanced, and, to the extent relevant, the expected look-back period for refinanced eligible Green Projects.

【Guidance】

[Measures for when proceeds are allocated to refinancing]

3) While the proceeds allocated to refinancing can maintain existing Green Projects, these Green Projects have already started before the refinancing takes place, and thus have

different environmental additionality from initial financing of new Green Projects.

4) The explanations that borrowers provide to the lenders include (1) the estimated amount (or share) of the loan proceeds being allocated for refinancing, and (2) which Green Projects (or Green Project categories) are to be refinanced.

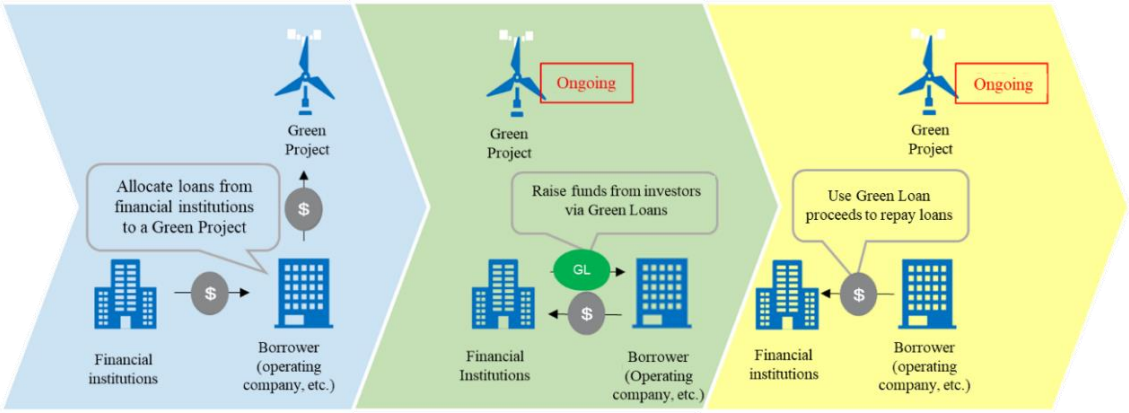
5) In cases where the percentage of proceeds allocated to new Green Projects is greater than that for refinancing, providing an estimated amount (or share) of the proceeds being allocated to a new project may serve to enhance the assessment of the Green Loan.

6) When Green Loans are used multiple times to refinance an asset that requires long-term maintenance, the borrower should clearly disclose the asset's age, remaining life and the amount to be refinanced as of the time of procurement, evaluate the long-term sustainability of environmental benefits and obtain an assessment from an external reviewer as necessary. (APLMA, LMA, LSTA (2023.2) "Guidance on Green Loan Principles")

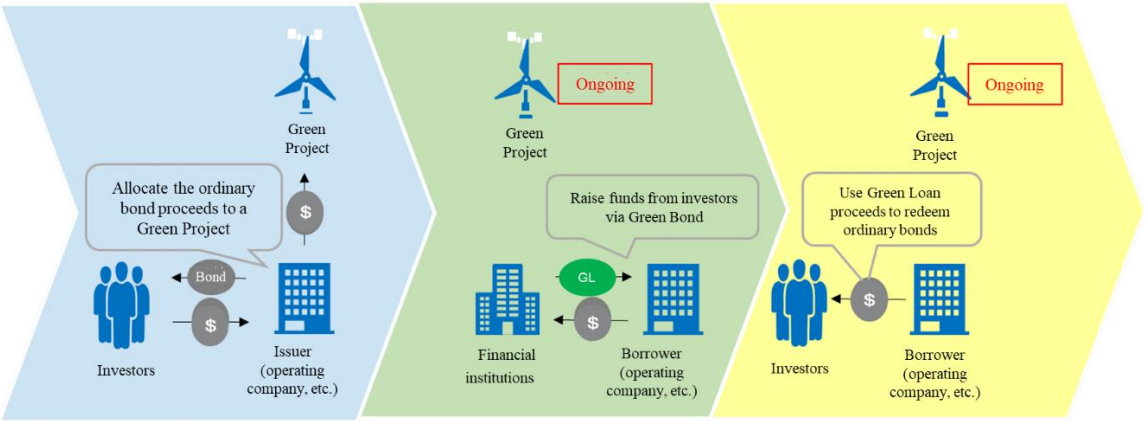
<Possible refinancing examples>

* Possible examples are not limited to the following:

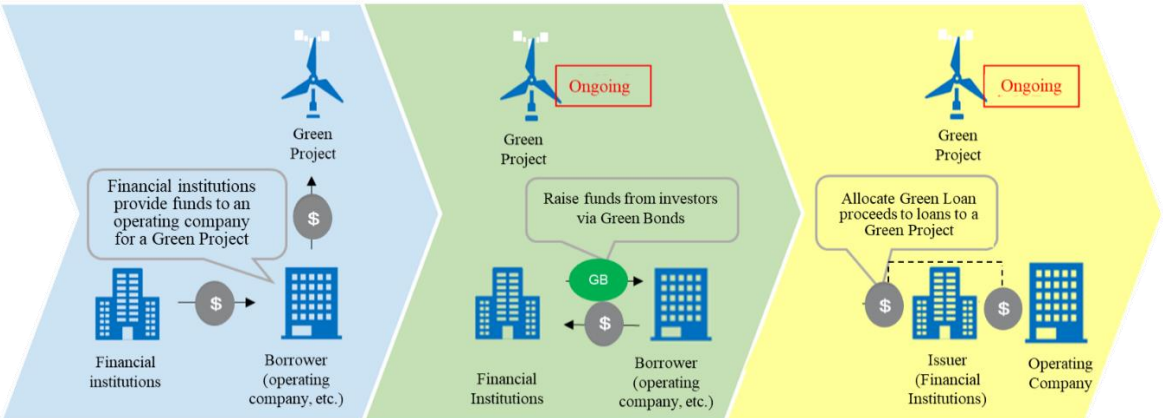
- Cases where the Green Loan proceeds are allocated to repay (refinance) loans related to Green Projects.



- Cases where new Green Loan proceeds are used to redeem a bond that has been issued, or repay a loan that has been taken out, to finance existing or completed Green Projects at maturity. *An example of a completed Green Project may include the construction of green buildings.



- Cases where financial institutions allocate Green Loan proceeds as a resource for existing loans linked to Green Projects.



【Green Loan Principles】

A green loan may take the form of one or more tranches of a loan facility, and may be made by way of a term loan, revolving credit facility and/or contingent facilities. Considerations for revolving credit facilities are set out in Appendix 1.

The GLP explicitly recognise broad, non-exhaustive categories of eligibility for Green Projects, which contribute to environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.

The following list of project categories, while indicative only and high-level, captures common types of projects supported, or expected to be supported by the green loan market. Green Projects include assets, investments and other related and supporting expenditures such as R&D that may relate to more than one category and/or environmental objective. Three environmental objectives identified above (pollution prevention and control, biodiversity conservation and climate change adaptation) also serve as project categories in the list. As such, they refer to the projects that are more specifically designed to meet these environmental objectives.

The eligible Green Projects categories, listed in no specific order, may include, but are not limited to:

• Renewable energy (including production, transmission, appliances and products);
• Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products);
• Pollution prevention and control (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/ emission-efficient waste to energy);
• Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);
• Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);
• Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);
• Green technologies (such as carbon extraction technologies and energy storage systems);

• Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation);
• Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems);
• Circular economy adapted products, production technologies and processes (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services; and/or certified eco-efficient products); and
• Green buildings (that meet regional, national or internationally recognised standards or certifications for environmental performance).

While the GLP's purpose is not to take a position on which green technologies, standards, claims and declarations are optimal for environmentally sustainable benefits, it is noteworthy that there are several current international and national initiatives to produce taxonomies and nomenclatures, as well as to provide mapping between them to ensure comparability. These may provide useful guidance to green loan borrowers as to what may be considered green and eligible by lenders, but each institution will nonetheless need to determine whether they wish to align their lending with these taxonomies, and, if so, whether to do so in whole or in part. These taxonomies are currently at various stages of development.

There are many institutions that provide independent analysis, advice and guidance on the quality of different green solutions and environmental practices. However, it is recognised that definitions of green and green projects may vary depending on sector and geography.

【Guidance】

[Examples of the use of proceeds]

1) Examples of the use of proceeds may include Green Projects described in Annex 1.

2. Process for Project Evaluation and Selection

【Green Loan Principles】

The borrower of a green loan should clearly communicate to its lenders:

• the environmental sustainability objective(s) of the Green Projects;

• the process by which the borrower determines how the project(s) to be funded fits within the eligible Green Projects categories; and

• complementary information on the processes by which the borrower identifies and manages perceived, actual or potential environmental and social risks associated with the relevant project(s).

【Guidance】

[Communication with lenders in advance on the process for project evaluation and selection]

1) When individual Green Projects to which Green Loan proceeds will be allocated are not determined (e.g., (1) in cases where a corporation or a local government borrows a Green Loan to raise funds for Green Projects in the relevant business and project category and (2) in cases where financial institutions raise funds for investments and loans for a large number of Green Projects, etc.), the borrowers should establish, criteria for determining the eligibility of the Green Projects based on the objectives, and provide lenders with such information, in addition to the above information in the Green Loan Principles, in advance. This communication may be unnecessary, when individual Green Projects to which Green Bond proceeds will be allocated are already determined.

2) When individual Green Projects have not been selected, the borrower may also consider establishing a common criteria and process for evaluating and selecting projects for Green Loans and or other financial instruments, as well as the process by which the borrower identifies, mitigates and manages the perceived environmental and social risks associated with the relevant project(s).

3) Communication with lenders on the use of proceeds should specify the project category of the Green Project, such as the construction of facilities for a wind power generation project or lending to projects related to biomass power generation, so that lenders and other relevant parties are able to evaluate the appropriateness of the use of proceeds. In cases where individual Green Projects have been specified, it is recommended that borrowers clearly specify the relevant projects.

[Environmental sustainability objectives]

4) Environmental sustainability objectives are the environmental benefits that the borrower intends to achieve through the Green Loans, such as climate change mitigation and adaptation and the conservation of biodiversity.

[Criteria]

5) Criteria provides the basis for evaluating and selecting eligible Green Projects in light of the environmental sustainability objective. For instance, if climate mitigation or adaptation is the main environmental objective, the proceeds may be used for Green Projects that will reduce GHG emissions such as renewable energy projects.

6) The following are the examples of the criteria for evaluating and selecting Green Projects: It is recommended that the borrower explains to lenders in advance any environmental standards or certification that the borrower will refer to in evaluating and selecting a Green Project to be financed.

<Examples of "criteria" for the evaluation and selection of Green Projects>

* These are examples only and not limited to the following:

- Projects should fall under the categories specified for the use of proceeds in the GLP or in the Guidelines.
- Projects for renewable energy should not fall under the category of projects with significant negative impacts on the environment and society as specified in the Equator Principles.
- Projects should fall under the category of projects that build energy efficient buildings for certification by environmental certification systems such as LEED, CASBEE, and BELS.

[Process by which the borrower determines how the projects to be funded fits within the eligible Green Projects categories]

7) The process for evaluation and selection of Green Projects refers to, for example, the basis for how borrowers determine why certain projects can provide environmental benefits appropriately in light of the objectives and criteria for the use of Green Loan proceeds, how and by whom the above criteria are applied and used to determine whether Green Projects are eligible in light of the environmental objectives (which division actually conducts the evaluation and selection, and determines the eligibility).

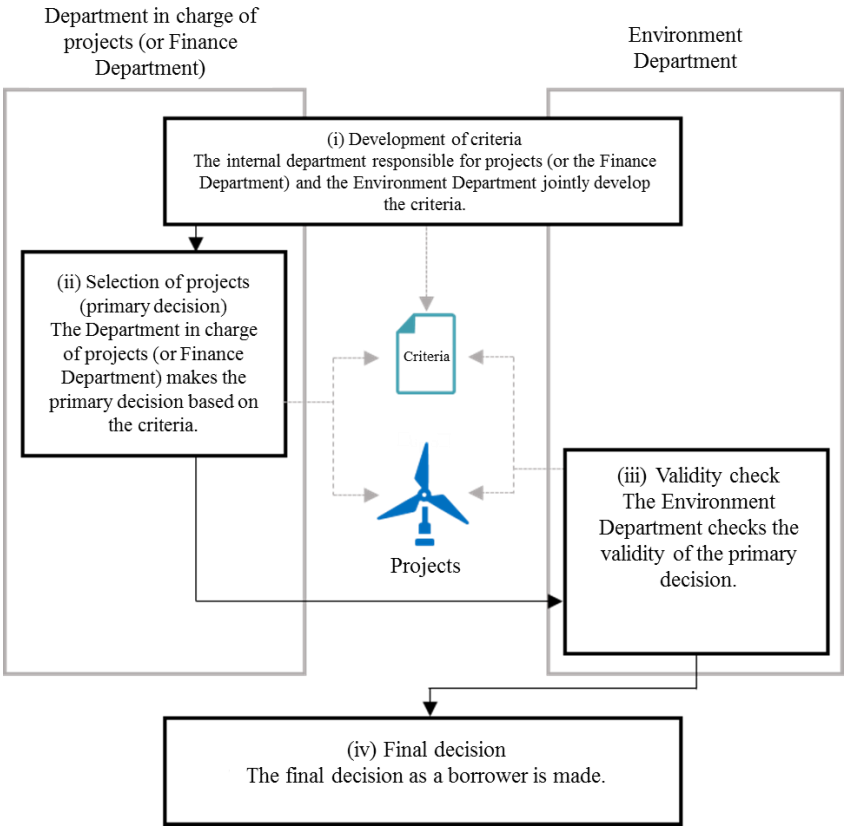
8) It is recommended that internal departments with environmental expertise, such as the environment related department, or external institutions are involved in the evaluation and selection process of Green Projects to ensure suitability from an environmental point of view.

9) The following are examples of project evaluation and selection process for Green Projects:

<An example of a decision-making process>

* This is an example only and not limited to the following:

- An internal department responsible for the projects (or the Finance Department) and the Environment Department jointly develop the criteria. After the department responsible for the projects (or the Finance Department) uses the criteria to make the primary decision regarding project eligibility, the Environment Department checks the validity of the primary decision before making the final decision as the company.



[Processes related to the identification, mitigation, and management of environmental and social risks]

10) The process of identifying, mitigating, and managing associated environmental and/or social risks refers to the identification, mitigation, and management of significant negative environmental and/or social impacts as well as the environmental and social risks associated with the implementation of the project.

11) In cases where Green Projects have associated negative environmental and/or social risks along with the intended environmental benefits, borrowers should explain these negative impacts in addition to the assessment results and how the issuer will address them in their communication, so that lenders and market participants can appropriately evaluate these impacts.

12) For example, hydropower generation above a certain scale may have associated negative impacts such as land modification, etc (see Annex 1 of this Guidelines).

13) These negative impacts could outweigh or diminish the environmental benefits and value of Green Projects, and it is important that the process for identifying and managing the potentially significant environmental and social risks of Green Projects are explained to lenders in advance.

[Lenders' accompanying borrowers' formulation of the evaluation and selection process]

14) Loans, traditionally, are a transaction based on the relative relationship between the borrower and lender and smooth financing would be facilitated by the financial institution, who is the lender, assisting the borrower in the formulation of a green finance framework.

【Green Loan Principles】

Borrowers are also encouraged to:
• position the information communicated above within the context of their overarching objectives, strategy, policy and/or processes relating to environmental sustainability;
• provide information, if relevant, on the alignment of projects with official or market-based taxonomies, related eligibility criteria, including, if applicable, exclusion criteria, and also disclose any green standards or certifications referenced in project selection; and
• have a process in place to identify mitigants to known or potential material risks of negative social and/or environmental impacts from the relevant project(s). Such mitigants may include clear and relevant trade-off analysis undertaken and monitoring required where the borrower assesses the potential risks to be meaningful.

【Guidance】

[Incorporation into overarching goals, strategies, etc]

15) The borrowers' "overarching objectives, strategy, policy" may include medium-term

management plans and sustainability strategies, etc.

[Alignment with related standards and certifications, and information disclosures]

16) Borrowers are recommended to disclose relevant information and environmental standards and certifications referenced (e.g., Annex 1 of the Guidelines, taxonomies, other environmental standards and certifications) when they use such information or standards as eligibility criteria for Green Projects or exclusion criteria for negative risks associated with Green Projects.

17) Borrowers are also recommended to explain how the actual Green Project is aligned with the referenced environmental standards and certifications, when and if borrowers refer to them. In addition, when obtaining external certifications, borrowers are recommended to explain the expected environmental benefits to be achieved, rather than just satisfying the certification requirements.

3. Management of Proceeds

【Green Loan Principles】

The proceeds of a green loan should be credited to a dedicated account or otherwise tracked by the borrower in an appropriate manner, so as to maintain transparency and promote the integrity of the product.

Management of proceeds should be attested to by the borrower in a formal internal process linked to the borrower's lending and investment operations for Green Projects. The borrower should make known to the lenders any intended types of temporary placement for the balance of unallocated proceeds.

Where a green loan takes the form of one or more tranches of a loan facility, each tranche(s) applicable to the Green Project(s) must be clearly labelled, with proceeds of the green tranche(s) credited to a separate account or otherwise tracked by the borrower in an appropriate manner. For the avoidance of doubt, a facility cannot be labelled as green if it includes a green and non-green tranche(s); the green label applies only to the tranche(s) aligned to the four core components of the GLP.

The proceeds of green loans can be managed per loan (loan-by-loan approach) or on an aggregated basis for multiple green loans (portfolio approach).

【Guidance】

[General information]

1) It is recommended that lenders endeavor to promptly allocate unallocated funds to Green Projects.

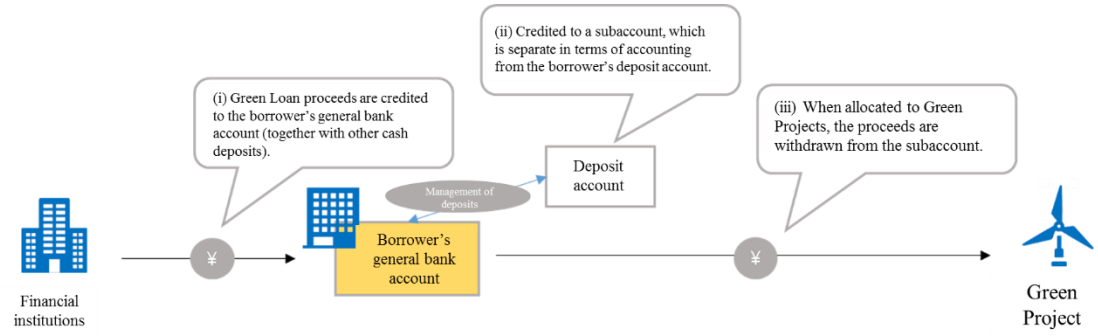
[Methods for the tracking and management of proceeds]

2) Possible methods for the tracking and management of proceeds include the following:

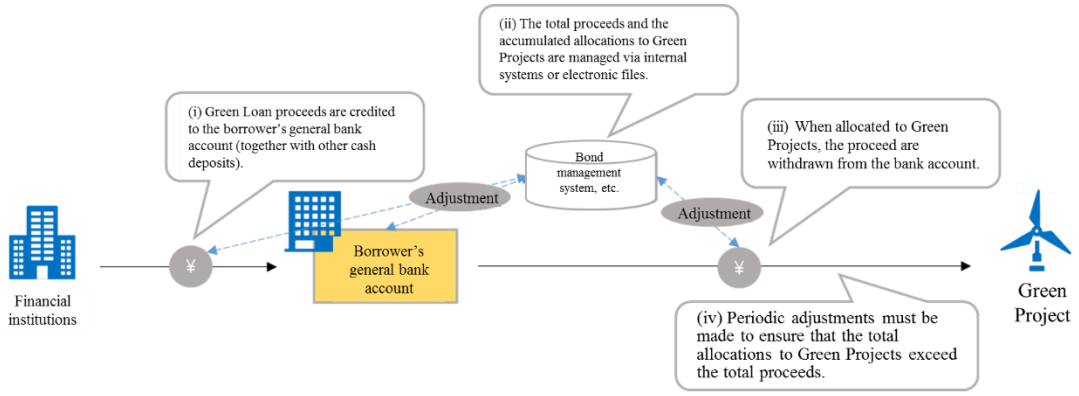
<Examples of possible methods for the tracking and management of proceeds>

* These are examples only and not limited to the following:

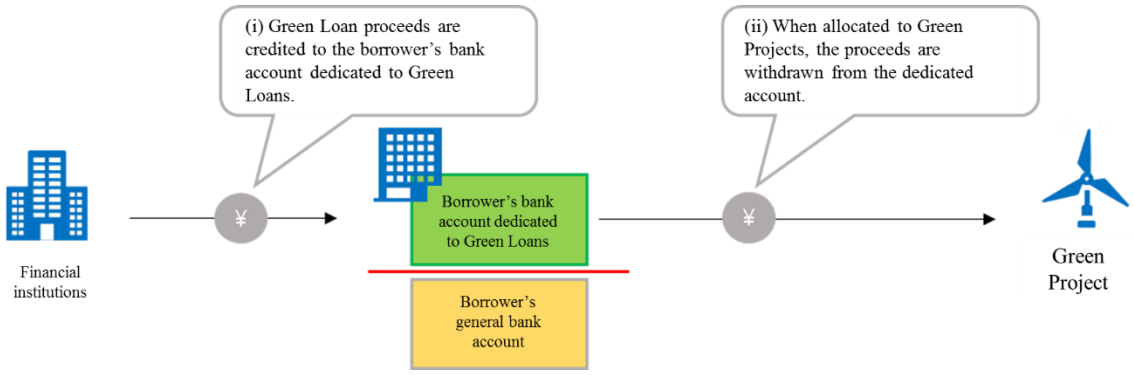
- The Green Loan proceeds are credited to a subaccount that is financially separate from other accounts, and the proceeds are withdrawn from this account when allocated to Green Projects.



- Manage the total proceeds and the accumulated allocations to Green Projects via internal systems or electronic files and periodically adjust to ensure that the latter exceeds the former.



- The Green Loan proceeds are credited to a separate account and managed separately from other business funds. When allocating the proceeds to Green Projects, the proceeds are taken out from the said separate account.



- Borrowers are recommended to appropriately keep evidence documents that demonstrate how the Green Loan proceeds have been tracked and managed.

[Communication with lenders in advance on methods for the tracking and management of proceeds]

3) It is recommended that borrowers communicate to lenders, in advance, on how Green Loan proceeds will be tracked and managed. (APLMA, LMA, LSTA (2023.2) ”Guidance on Green Loan Principles”)

4. Reporting

【Green Loan Principles】

Borrowers should make, and keep, readily available up to date information on the use of proceeds, such information to be renewed annually until the green loan is fully drawn (or until the loan maturity in the case of an revolving credit facility), and on a timely basis in the event of material developments. This annual report should include a list of the Green Projects to which the green loan proceeds have been allocated and a brief description of the projects, the amounts allocated and their expected and, where possible, achieved impact. Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the GLP recommend that information is presented in generic terms or on an aggregated portfolio basis (e.g. percentage allocated to certain project categories). Information need only be provided to those institutions participating in the loan.

【Guidance】

[Reporting and disclosures on the use of proceeds after the procurement of Green Loans]

1) Lenders provide Green Loans because they expect that their funds will be allocated to Green Projects that have environmental benefits. Accordingly, the impact expressed in the reporting is an important element in the lender's ongoing monitoring of the effectiveness of loans. Borrowers should report the latest information on the use of Green Loan proceeds to the institutions participating in the loan after financing is conducted.

2) If a borrower claims that the loan is a Green Loan, the borrower is recommended to publicly disclose the latest information on the use of Green Loan proceeds after the procurement. The borrower may post the information on the MOE's Green Finance Portal or their official websites. Publicly disclosing the latest information on the use of Green Loan proceeds leads to gaining public support and is an important element to ensure transparency. This does not apply to borrowers who do not claim that their loans are Green Loans.

[Timing of reporting or disclosure]

3) Material developments include, but is not limited to, the sale of the asset or project for which the proceeds are used, a serious accident in the project or the occurrence of an event that affects the green characteristics of the project.

[Method of reporting or disclosure]

4) A brief description of each Green Project includes the up-to-date progress of the Green Project. In case where there are unallocated Green Loan proceeds, it is recommended that content of disclosure include the amount or share of unallocated proceeds and the expected timing of allocation, in addition to how the unallocated proceeds will be managed until allocation.

5) If Green Loan proceeds have been allocated to the refinancing of existing projects, it is recommended that disclosure includes: 1) the approximate amount (or share) of proceeds allocated to refinancing, and 2) a list of the Green Projects (or the project categories) refinanced.

6) Information may be presented in generic terms or in an aggregated portfolio. For example, disclosure by project category in generic terms, such as on, wind power generation projects, projects to introduce high-energy efficient equipment, or projects for the construction and management of waste recycling-related facilities.

7) Other specific ways of disclosure may include those described in Annex 3.

【Green Loan Principles】

Transparency is of particular value in communicating the expected and/or achieved impact of projects. The GLP recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures (for example, energy capacity, electricity generation, greenhouse gas emissions reduced/avoided, etc.) and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. Borrowers with the ability to monitor achieved impacts are encouraged to include those in regular reports to those institutions participating in the loan.

【Guidance】

[Indicators and methods for calculating environmental benefits]

8) In disclosing the expected environmental benefits of projects, it is important that borrowers use appropriate indicators while ensuring consistency with environmental sustainability objectives and criteria for Green Projects, as specified in “2. Process for Project Evaluation and Selection,” and the characteristics of Green Projects.

9) With both international and domestic lenders increasingly calculating the GHG emissions of their own loans and aiming to achieve net zero emissions, the quantification of environmental benefits has also become an important factor from the perspective of lenders.

10) When quantification is difficult, external certifications, such as LEED, CASBEE, BELS, FSC, MSC, or ASC, obtained through Green Projects may be considered as qualitative indicators.

11) Other specific examples of indicators may include, but are not be limited to, those listed in Annex 1.

12) Specific examples of methodologies for the calculation of environmental benefits when using quantitative indicators may include those explained in Annex 2.

[Disclosure in the case of syndicated loans, etc.]

13) Information pertaining to Green Loans is primarily disclosed by companies, etc., who are borrowers. However, in the case of syndicated loans, if a participating financial institution requests for information regarding the green nature of the loans in the reporting that goes beyond the scope of information disclosed by the borrower in the relationship with the arranging financial institution and participating financial institutions, the arranging financial institution, while giving consideration to the importance of the request and the composition of the syndicate, is expected to act in good faith and engage with the borrower to consider the request and disclose the concerned information, given that such information is important for avoiding green wash.

14) In particular, if there is material negative information that has not been accurately communicated to participating financial institutions, the arranging financial institution is expected to urge the borrower to accurately disclose such information.

15) However, when there are confidentiality or competitive considerations, the borrower may consider to disclose a summary of such information, or the information in an aggregated format.

5. Review

【Green Loan Principles】

Where appropriate, it is recommended that borrowers appoint (an) external review provider(s) to assess the alignment of their green loan or green loan programme with the four core components of the GLP.

【Guidance】

[Examples of contents that can be externally reviewed]

1) Examples of aspects that can be externally reviewed include the following:

<Examples of external review aspects>

* Possible examples are not limited to the following:

1) Pre-contract review

- The evaluation of the appropriateness of Green Projects to which the Proceeds will be specifically allocated.
- The evaluation of the appropriateness of the criteria for evaluating/selecting Green Projects to which the Proceeds will be allocated and the implementation system for evaluating/selecting Green Projects based on such criteria.
- The evaluation of the appropriateness of specific methods to track and manage the proceeds from Green Loans.
- The evaluation of the appropriateness of the expected environmental benefits (or actual environmental benefits in the case of refinancing) of Green Projects (including the appropriateness of the methods for calculating environmental benefits and preconditions for the calculation).

2) Post-contract review

- The evaluation of whether the management of the Green Loan proceeds and the allocation of the Proceeds to Green Projects were executed properly by using the methods specified by the borrower before the issuance of the Green Loans.
- The evaluation of whether the Green Projects to which the Green Loan proceeds were allocated have actual environmental benefits and if they were calculated properly by using the methods specified by the borrower before the issuance of Green Loans.

2) Such reviews can be particularly useful in the following cases:

<Examples of cases where obtaining external reviews is particularly useful>

* Possible examples are not limited to the following:

- Cases where Green Projects designated for a Green Loan include those that have negative environmental and social impacts in addition to environmental benefits, and where a borrower can obtain an objective evaluation

of the appropriateness in allocating proceeds to such projects.

- Cases where a borrower requires an objective evaluation of the appropriateness of the determination criteria or the appropriateness of the decisions regarding the evaluation and selection of Green Projects based on such criteria, as expertise existing within the borrower's organization is insufficient.
- Cases where a borrower requires an objective evaluation of the appropriateness of the environmental benefit calculation method developed by the borrower when the Green Projects to which the proceeds will be allocated are relatively unique and therefore, is lacking in an existing framework for calculating the environmental benefits of the projects.
- Cases where a borrower finds the necessity to assist in the understanding of the Green Loans among selected overseas lenders expected to be unfamiliar with Green Projects and related information in Japan.

3) In cases where an external review of the entire Green Loan framework was obtained in the past, the borrower may not have to obtain an external review again when procuring a new Green Loan under the same framework. However, careful consideration may be necessary, as there approaches to considering the appropriateness of the schemes of Green Projects and Green Loans and or the evaluation criteria of external reviewers may have changed since the last review. For example, an external review may not be unnecessary if an SPC that exclusively conducts Green Projects, which has obtained a review on the environmental benefits of its projects, is to procure more than one Green Loan for the same type of projects. However, when a borrower does not obtain an external review, lenders and other market participants may request that the borrower explains the appropriateness of the Green Loan framework with sufficient transparency.

【Green Loan Principles】

Alternatively, given that the loan market is traditionally a relationship-driven market and therefore lenders are likely to have a broad working knowledge of the borrower and its activities, self-certification by a borrower, which has demonstrated or developed the internal expertise to confirm alignment of the green loan with the key features of the GLP, may be sufficient.

Nonetheless, borrowers are recommended to document thoroughly such expertise, including the related internal processes and expertise of their staff. This documentation should be communicated to institutions participating in the loan on the basis agreed between the parties in the legal documentation. When appropriate, and taking into account confidentiality and competitive considerations, borrowers are recommended to make publicly available, via their website or otherwise, the parameters on which they assess Green Projects, and the internal expertise they have to assess such parameters.

【Guidance】

[Self-assessment]

4) <Examples of development of internal expertise and demonstration of effectiveness of confirmation>

* Possible examples are not limited to the following:

- At the borrower, a department that has expertise and is independent from the department responsible for projects performs assessment.
- If the department responsible for projects performs assessment for itself, it should do so based on the criteria and assessment method set beforehand and has a department independent from the department responsible for projects confirm its validity.

[Prior communication with lenders on self-assessment]

5) For a borrower claim financing through Green Loans, and to gain public recognition and acceptance as such, they must ensure transparency. Therefore, borrowers are recommended to make publicly available, via their website or otherwise, the self-assessment results.

【Green Loan Principles】

There are a variety of ways for borrowers to obtain outside input to their green loan process and there are several types of review that can be provided to the market. Where applicable, borrowers should consult the Guidelines for Green, Social and Sustainability-Linked Loans External Reviews (Guidelines for External Reviews) for recommendations and explanations on the different types of reviews.

The Guidelines for External Reviews are a market-based initiative to provide information and transparency on the external review processes for borrowers, underwriters, lenders, other stakeholders and external reviewers themselves.

The GLP encourage external review providers to disclose their credentials and relevant expertise and communicate clearly the scope of the review(s) conducted. Where applicable, any external review should be communicated and made available in a timely manner to all the financial institutions party to the loan in accordance with the relevant loan documentation provisions. Where appropriate, and taking into account confidentiality and competitive considerations, borrowers should make the external review publicly available, or an appropriate summary, via their website or otherwise.

【Guidance】

[General information]

6) There are a variety of types of external reviews including, Second Party Opinions (SPO), Verifications, Certifications and Scorings/Ratings. (APLMA, LMA, LSTA (2024.1) “Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews”, ICMA (2022.6) “Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews”)

A) Second Party Opinion (SPO)

An institution with environmental/social/sustainability expertise that is independent from the borrower may provide a Second Party Opinion. The institution should be independent from the borrower’s adviser for its loan framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second Party Opinion. Any concerns on the institution’s independence should be disclosed to lenders.

B) Verification

A borrower can obtain independent verification against a designated set of criteria. Such criteria are those pertaining to environmental, social and sustainability, or, in the case of Sustainability-Linked Loans explained in Chapter 3, to KPIs and SPTs.

C) Certification

A borrower can have its loan or associated loan framework, the use of proceeds, or the KPIs and SPTs, certified against external green, social or sustainability standards or labels. Alignment with evaluation criteria of the standard or label is normally tested by a qualified third party.

D) Scoring/Rating

A borrower can have its loan or associated loan framework, the use of proceeds, the selection of KPIs, and or the calibration of the level of ambition of SPTs, evaluated or assessed by third parties, such as specialized research providers or rating agencies etc, according to their established scoring/rating methodology. This rating or score may include elements of an SPO.

7) In addition to the “External Review Guidance for Green, Social, and Sustainability-Linked Loans” APLMA, LMA, LSTA (2024.1), the “Code of Conduct for ESG Evaluation and Data Providers” Financial Services Agency (FSA) (2022.12), should be referred to in the Japanese market. The Code of Conduct sets out six principles, guidelines, and their concept under the following four topics, based on IOSCO’s “Environmental, Social, and Governance (ESG) Ratings and Data Product Providers Final Report” as well as the discussions held in the “Technical Committee for ESG Evaluation and Data Providers, etc.,” under the FSA.

Ensuring transparency

ESG evaluation and data providers should disclose the purpose, concept, and basic

methodology of their ESG evaluation.

・ Human resources development

ESG evaluation and data providers should secure necessary professional human resources and develop the professional skills of employees

・ Avoiding conflicts of interests

ESG evaluation and data providers should identify their activities and situations that could potentially undermine the independence, objectivity, and neutrality of their businesses, and avoid potential conflicts of interest or appropriately manage and reduce the risk of conflict of interest.

・ Communication with companies

ESG evaluation and data providers should clarify the point of contact for the companies they assess, ensure that the data on which the evaluation is based shall be available for confirmation and correction, and that such procedures are made publicly available in advance.

[Code of conduct for external reviewers]

8) External reviewers should follow the following codes of conduct when giving reviews. (APLMA, LMA, LSTA (2024.1) “Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews“

1) Ethical standards as professionals

The below ethical standards of external reviewers as professionals are based on the “Code of Ethics for Professional Accountants” established by the International Ethics Standards Board for Accountants of the International Federation of Accountants, which the Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews (2024.1) mention that external reviewers should consider the relevance of and the corresponding JICPA Code of Ethics established by the Japanese Institute of Certified Public Accountants.

(i) Integrity

External review providers must act with integrity at all times and must not engage in the preparation and or disclosure of reviews based on reports or information that they recognise to be:

- Information that contains materially false or misleading statements
- Information that contains statements or information that have been prepared without due caution required in the performance of duties
- When any omission or obfuscation of necessary information will cause misunderstanding, information that omits or obfuscates such information.

(ii) Objectivity

External review providers should avoid holding preconceptions, avoid conflicts of interests, avoid succumbing to undue influence form others and maintain fairness at all times. As professionals, external review providers should refuse to provide a review if and when required to distort facts or to deliver a biased review for the purpose of justifying a predetermined conclusion.

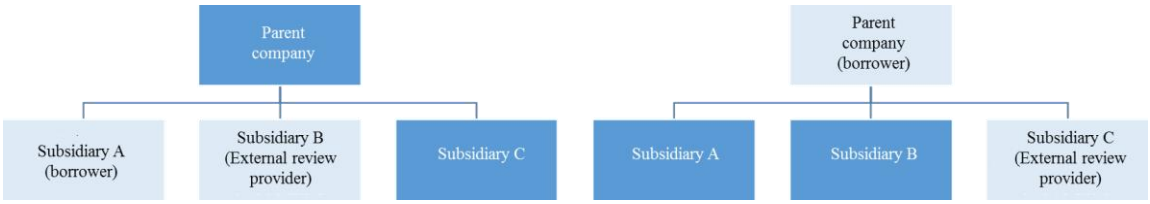
Maintaining fairness requires ensuring objectivity in the judgment of business operations. More specifically, external reviewers should be independent from, and should be a third party to, the borrower. Independency/impartiality should be judged based on personal and or capital relationships. For example, an external review is not considered to be independent or impartial in the following cases:

<Examples where independency/impartiality is not ensured>

* Possible examples are not limited to the following:

<Capital relationships>

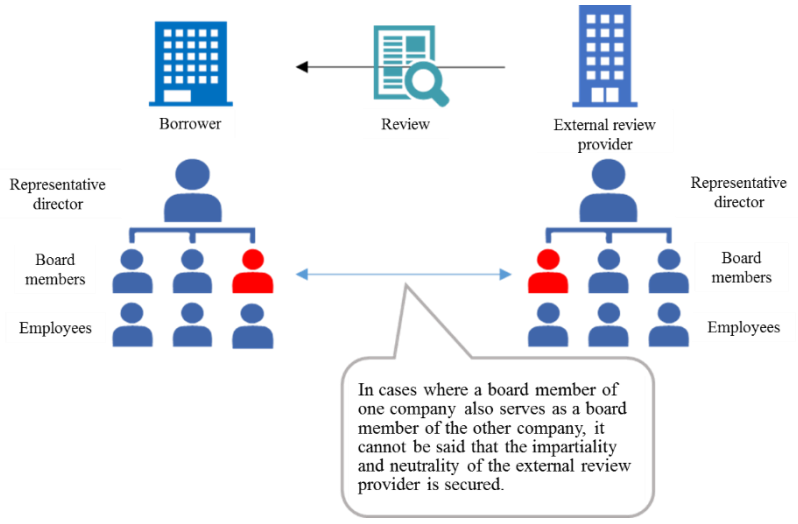
- Cases where a borrower and an external review provider are subsidiaries of the same parent company
- Cases where a borrower is the parent company of an external review provider (subsidiary)



<Personal relationships>

- Cases where a board member or one in a similar position* of one company (borrower) also serves as a board member of the other company (external reviewer)

  * A board member or one in a similar position could include the representative director, auditor, executive, and or one in any other position with legal authority over the execution and or the auditing of operation and finances under corporate law, civil law, and or any other relevant law, regardless of title.



(iii) Abilities and due care as professionals

External reviewers need to maintain the level of abilities necessary to perform their duties when providing an external review in order to provide an appropriate external review.

External reviewers should adhere to requirements as professionals and perform their duties with due care.

External reviewers should ensure that any party working under their instructions is receiving appropriate training and supervision when performing their duties.

The following professional expertise is required of external reviewers.

- To understand and be up to date on relevant knowledge, including international market trends and the most recent professional practices in their specialist areas, to always endeavor to improve their skills, and to be equipped with the latest specialist knowledge.
- To have the relevant expertise for the type of external reviews they provide and for the type of Green Projects for which they provide a review.
- To employ or to ensure the participation of other specialists in areas where they do not have sufficient expertise. It is not necessarily required for one external reviewer to evaluate all the aspects of a particular Green Loan. It is possible for more than one external reviewer to review different aspects of a Green Loan based on the respective expertise of each provider.

The professional expertise desirable of external reviewers includes the following:

<Examples of expertise>

* Possible examples are not limited to the following:

1) When reviewing the appropriateness of the Green Projects to which proceeds will be allocated, the appropriateness of the evaluation and selection process of the Green Projects and the appropriateness of environmental benefits

Expertise on criteria to determine the existence of (or lack thereof) environmental benefits, expertise on indicators to be referred to when verifying the method to quantify environmental benefits, and expertise on environmental assessment and environmental certifications

2) When reviewing the appropriateness of the management and allocation of proceeds

Expertise in financial and accounting audits

(iv) Duty of confidentiality

External review providers must not disclose to others or use for the benefit of themselves or third parties any information that has come into their possession in the course of their duties without any justifiable reason. With respect to their compliance with the duty of confidentiality, external reviewers should establish, publish or provide their customers with a policy and measures concerning the protection of customer information.

(v) Actions as professionals

External reviewers should be aware of their position as professionals, adhere to the requirements and expectations of professionals and should not take any action that will harm the credibility of or bring disrepute to external reviewers in general.

２）Requirements of external reviewers as an organization]

(vi)External reviewers should have a sufficient organization structure to appropriately undertake external reviews and should have predetermined methodologies and procedures in place to conduct external reviews.

(vii)External reviewers should employ a reasonable number of people who have professional experience and qualifications necessary to cover the areas subject to the external reviews to be conducted.

When using liability insurance concerning specialist areas, external review providers should note the coverage scope of such insurance. (APLMA, LMA, LSTA (2024.1) “Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews”)

３）Matters that should be evaluated by external review providers]

(viii)Content which external reviewers should evaluate is dependent on the type of external review, but for SPOs the following may be considered, among others. (APLMA, LMA, LSTA (2024.1) “Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews”)

- Alignment of their green loan with the four core components of the GLP
- Intended environmental benefits of the Green Project for which the funds are to be used
- The potentially material environmental and/or social risks
- (negative effects) associated with the projects, and the process for identifying, mitigating and managing them
- Borrower's overarching objectives, strategies and processes relating to environmental and social sustainability

4) Information which should be included in documents and materials concerning external review results

(ix)External reviewers should include a general description of the purpose of an external review, scope of the review, qualifications of the persons who conduct the external review and their expertise as external reviewers. At minimum, they need to show where such information is available. (APLMA, LMA, LSTA (2024.1) "Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews") For instance, it is recommended that external reviewers clearly demonstrate their expertise in documents and materials concerning review results by including statements such as the following.

<Examples of description concerning the expertise of external reviewers>

* Possible examples are not limited to the following:

<Expertise>

"Our company has offered environmental evaluation services for about ● years and has solid expertise in this field."

(x)External reviewers should include, in the documents and materials concerning their review results, a statement on their independence from the borrower and their policy on conflicts of interest. At minimum, they need to show where such information is available.

(xi)There are various types of external reviews. Even if they have the same name, what they evaluate or the criteria they use for evaluation may differ. To assist review users in the understanding of its contents, external reviewers should clearly explain the definitions they use and their analytical approach and methodologies including the evaluation criteria applied to respective items in the documents and materials concerning their review results. (APLMA, LMA, LSTA (2024.1) "Guidelines for Green, Social, and Sustainability-Linked Loans External Reviews") For instance, these may include the following.

<Examples of the description of information concerning external reviews>

* Possible examples are not limited to the following:

This review evaluates the following aspects of the Green Loan.

(i) Pre-contract review of Green Loans		
Evaluation Aspects	Target	Evaluation Criteria
- The evaluation of the appropriateness of Green Projects to which the Proceeds will be specifically allocated.	○	Evaluation criteria of the company[32]
- The evaluation of the appropriateness of the criteria for evaluating/selecting Green Projects to which the Proceeds will be allocated and the implementation system for evaluating/selecting Green Projects based on such criteria.	○	Evaluation criteria of the company
- The evaluation of the appropriateness of specific methods to track and manage the proceeds from Green Loans.		
- The evaluation of the appropriateness of the expected environmental benefits (or actual environmental benefits in the case of refinancing) of Green Projects (including the appropriateness of the methods for calculating environmental benefits and preconditions for the calculation).	○	Evaluation criteria of the company
- The evaluation of the appropriateness of the specific methods for reporting the latest information on the use of proceeds scheduled to be procured through the Green Loans.		
(ii) Post-contract review of Green Loans		
Evaluation Aspects	Target	Evaluation Criteria
- The evaluation of whether the management of the Green Loan proceeds and the allocation of the proceeds to Green Projects were executed properly by using the methods specified by the borrower before the issuance of the Green Loans.		
- The evaluation of whether the Green Projects to which the Green Loan proceeds were allocated have actual environmental benefits and if they were calculated properly by using the methods specified by the borrower before the issuance of Green Loans.		

(xii)External reviews should have a conclusion/output, including the limitations of assessments made in external reviews. At minimum, they need to show where such information is available. (APLMA, LMA, LSTA (2024.1) “Guidelines for Green, Social, and Sustainability-Linked Loans

[32] While it is sometimes difficult to disclose detailed evaluation “criteria”, it is recommended to clearly state what type of criteria was used as much as possible.

External Reviews")

【Green Loan Principles】

Appendix 1
Application to Revolving Credit Facilities

The GLP were drafted such that they can be applied to a wide variety of loan instruments, including term loans, contingent facilities and/or revolving credit facilities.

One of the fundamental determinants of a green loan is the utilisation of the loan proceeds, which should be appropriately described in the finance documents and, if applicable, marketing materials. The use of proceeds component of a term loan is often easily identifiable. Revolving credit facilities, however, may not identify in similar detail such green use of proceeds in the legal documentation, but in any case proceeds should be utilised for eligible Green Project(s) throughout the lifetime of the revolving credit facility.
The parties to any proposed green loan taking the form of a revolving credit facility will need to determine how best to evidence the flow of funds to an agreed upon Green Project or Green Projects when applying the GLP to such a loan. A revolving credit facility may include a specific green tranche but, where not possible, a borrower may seek to report to the lenders the use of any revolving borrowings and/or identify Green Projects supported by the revolving credit facility.

Lenders are recommended to monitor and track the sustainability information provided by the borrower during the life of the loan, mindful of the need to preserve the integrity of the green loan product. In the absence of sufficient internal expertise at the lender to monitor the loan, external review is strongly recommended. Revolving credit facilities for general corporate purposes should not be categorised as "green" without satisfying the components listed in the GLP.

Chapter 3 Sustainability-Linked Loans

Section 1 Overview of Sustainability-Linked Loans

1. What are Sustainability-Linked Loans?

Sustainability-Linked Loans are loans that encourage borrowers to meet ambitious, pre-determined sustainability performance targets (SPTs). Specifically, such loans are those in which the relationships between sustainability objectives set out in the borrowers' comprehensive social responsibility strategies and the SPTs are organized, the degree of improvement in sustainability is assessed and measured by appropriate SPTs as measured by predetermined key performance indicators (KPI), and transparency is ensured through post-loan reporting. In other words, KPIs are indicators to measure the achievement of targets, and SPTs set the level of achievement for the indicator.

Unlike Green Loans, Sustainability-Linked Loans are often used for general business purposes, where the financing of the proceeds is not limited to a specific project. There are various types of loans and various facilities including bonding lines, guarantee lines, or letter of credits.

2. Benefits of Sustainability-Linked Loans

(i) Benefits to Borrowers

Benefits for borrowers of Sustainability-Linked Loans include the following:

1) Enhance corporate sustainability

Working on Sustainability-Linked Loans may lead to the development and implementation of sustainability strategies, risk management, and governance systems within the organizations through establishing ambitious SPTs for borrowers' overall business and incentive to achieve them. This also helps to satisfy ESG information disclosure requirements. In addition, it will improve the medium to long-term ESG assessment of borrowers, which will in turn help raise their corporate value. And if the selection of KPIs

and the calibration of SPTs are ambitious and credible, it could help differentiate the borrower's assessment of sustainability compared to its competitors. Moreover, this can lead to strengthening the borrower's corporate sustainability beyond the company itself and throughout the supply chain as a result of addressing ESG issues in its supply chain.

2) Enhance reputation through working on sustainable management and demonstrating proactive support for environmentally and/or socially sustainable economic activities

By raising funds through Sustainability-Linked Loans, borrowers can demonstrate commitment to ambitious sustainability goals and their proactive support for environmentally and/or socially sustainable economic activities, which can enhance their reputation.

3) Incentives in terms of lending conditions for improving sustainability performance

Sustainability-Linked Loans include incentives, such as interest rates that fluctuate in conjunction with SPTs, in order to motivate borrowers to improve their sustainability performance. A borrower may be able to raise funds on relatively favorable terms from financial institutions with preference for ESG loans by improving their sustainability management.

4) Strengthen a funding base by building relationships with new lenders

Diversifying a funding base is an effective means for borrowers to reinforce their fundraising strategies. Sustainability-Linked Loans may provide borrowers with an opportunity to strengthen their funding base through disclosing relevant information, ensuring transparency, and building new relationships with financial institutions that favor ESG loans.

(ii) Benefits to Lenders

The following are the benefits to lenders of Sustainability-Linked Loans:

1) Satisfy ESG finance requirements and enhance reputation

Some lenders are committed to providing ESG loans of a certain size. For such lenders, Sustainability-Linked Loans clearly match such commitment and provide a stable cash flow, unless in the case of defaults. Moreover, lenders that do not have such commitments can demonstrate support for environmentally and/or socially sustainable economic activities, potentially enhancing their reputation, while obtaining stable cash flows, unless in the case of defaults.

2) Achieve both financial returns and environmental and social impacts through lending

By providing Sustainability-Linked Loans, lenders can support borrowers generate

environmental and social impacts (listed below in '(iii) Environmental and Social Benefits') that contribute to creating a sustainable society while simultaneously gaining financial returns.

3) Motivate borrowers to improve their sustainability performance

By linking lending conditions and sustainability performance, lenders may motivate borrowers to enhance their sustainability management over the lending period, which in turn may lead to the maintenance and improvement of borrowers' corporate value.

4) Enable deeper engagement on sustainability with borrowers

Sustainability-Linked Loans enable lenders to have deeper dialogue with borrowers on business issues through SPTs or other sustainability goals, leading the lenders to providing solutions that meet borrowers' needs as well as business opportunities.

(iii) Environmental and Social Benefits

The environmental and social benefits of implementing Sustainability-Linked Loans include the following:

1) Contribute to global environmental conservation

The dissemination of Sustainability-Linked Loans internalizes incentives for borrowers to enhance and maintain sustainability management and expands the introduction of private sector funds for projects related to sustainable economic activities in environmental and other aspects, thus contributing to the long-term substantial reduction of GHG emissions in Japan and beyond. In addition to projects contributing to the reduction of GHG emissions, private-sector funds will be mobilized to projects related to economic activities that contribute to the formation of a sustainable society, thereby contributing to the prevention of the deterioration of natural capital, which is the foundation of long-term profits for companies.

2) Raise awareness of individuals who entrust their funds to financial institutions that provide Sustainability-Linked Loans

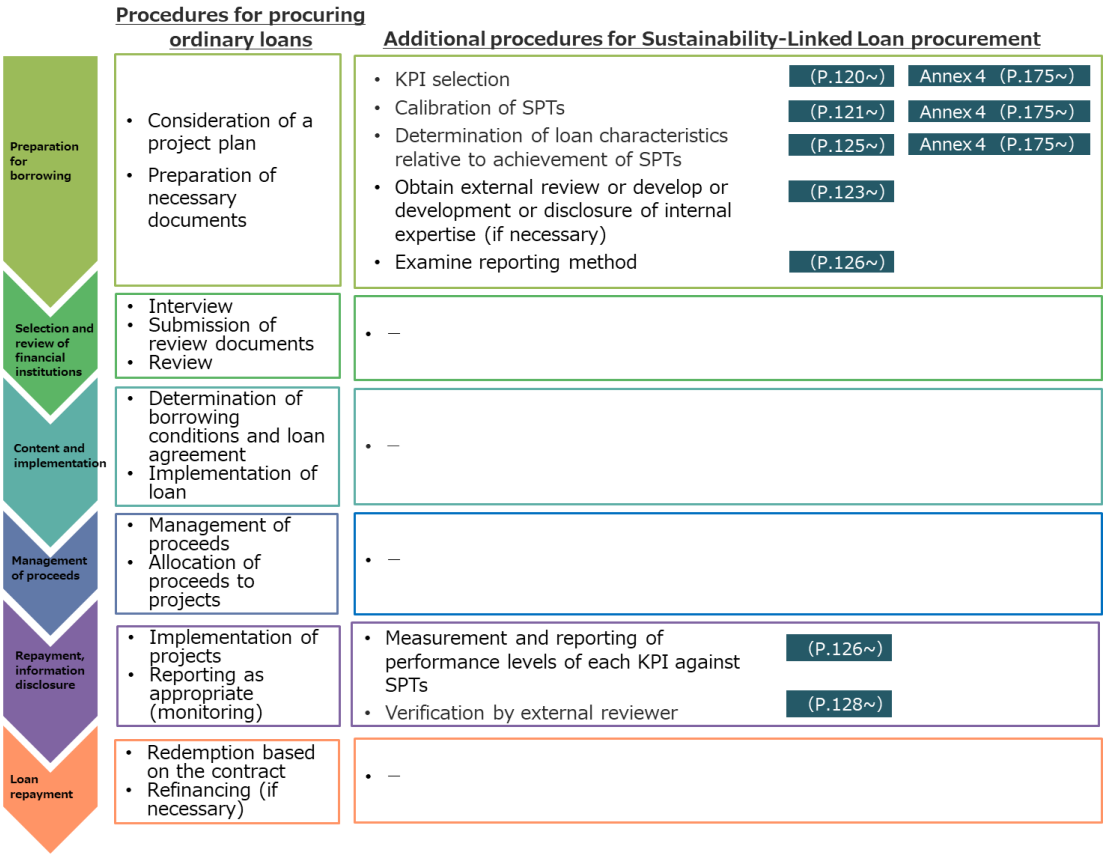
As Sustainability-Linked Loans become more widespread, financial institutions that are the trustees of assets will be motivated to more actively provide such loans by raising the awareness of individuals who deposit money in financial institutions that provide Sustainability-Linked Loans.

3) Contribute to solving social and economic issues through promotion of Sustainability-Linked Loans

Promoting projects related to economic activities that contribute to the formation of a sustainable society through the dissemination of Sustainability-Linked Loans will contribute to the realisation of a sustainable society, such as reducing energy costs, strengthening energy security, revitalizing regional economies, and improving resilience in times of disaster.

3 Flow of Sustainability-Lined Loans

When companies, local governments, etc. issue Sustainability Linked Loans, additional procedures are required alongside the normal procedures for issuing corporate bonds, municipal bonds, securitized products, etc. These are illustrated in the figure below.



*The page numbers in the figure refer to the relevant sections of these guidelines.

Section 2　Expected Elements of Sustainability-Linked Loans and Examples of Possible Approaches

【Sustainability-Linked Loan Principles】

The SLLP set out a framework, enabling all market participants to clearly understand the characteristics of a SLL, based around the following five core components:

1. Selection of KPIs
2. Calibration of SPTs
3. Loan Characteristics
4. Reporting
5. Verification

A SLL borrower should clearly communicate to its lenders[33] its rationale for the selection of its KPI(s) (i.e. relevance, materiality, whether it is core to the borrower's overall business) and the motivation for the SPT(s) (i.e. ambition level, benchmarking approach and how the borrower intends to reach such SPTs).

Borrowers are encouraged to position this information within the context of their overarching objectives, sustainability strategy, policy, sustainability commitments and/or processes relating to sustainability.

Borrowers are also encouraged to inform lenders of any sustainability standards or certifications to which they are seeking to conform.

【Guidance】

【General information】

1)　In Japan, there are examples of financial institutions developing 'Sustainability-Linked Loan

[33] In broadly syndicated deals, this information could flow to the lenders through the arrangers/bookrunners assisting the borrower with primary syndication.

Frameworks' not for their own financing purposes but as policies intended for their clients borrowing through sustainability-linked loans. Any such framework claiming to outline a sustainability-linked loan must comply with the five core components of the SLLP, just as any individual sustainability-linked loan, including the materiality of the KPIs to the borrower's business and the ambitiousness of the SPTs.

2) Information on the rationale for the selection of its KPI(s) etc., can be positioned within the context of lenders' medium-term management plan and/or overall sustainability strategy, etc.

【Lenders' accompanying borrowers' formulation of the evaluation and selection process】

3) Loans, traditionally, are a transaction based on the relationship between the borrower and the lender(s) and smooth financing may be facilitated by the lender providing procedural guidance and support to the borrower in addressing elements of Sustainability-Linked Loans, such as the formulation of the Sustainability-Linked Loan framework.

1. Selection of KPIs

【Sustainability-Linked Loan Principles】

SLLs aim to support a borrower's efforts in improving its sustainability profile over the term of the loan. They do so by aligning loan terms to the borrower's performance, which is measured using one or more sustainability KPIs that can be internal and/or external.
First and foremost, the KPIs must be material to the borrower's core sustainability and business strategy, and address relevant ESG challenges of its industry sector.

The credibility of the SLL product will rest on the selection of the KPI(s). It is important to the success of this product to avoid the proliferation of KPIs that are not credible.

The KPIs must be:
• relevant, core and material to the borrower's overall business, and of high strategic significance to the borrower's current and/ or future operations;
• measurable or quantifiable on a consistent methodological basis; and
• able to be benchmarked (i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition).

A clear definition of the KPI(s) should be provided by the borrower and should include the applicable scope or parameters, as well as the calculation methodology[34], a definition of a baseline and be benchmarked against an industry standard and/or industry peers where feasible.

【Guidance】

【Importance of KPI Selection】

1) As stated in the Sustainability-Linked Bond Principles, KPIs may be under its management's control in Sustainability-Linked Loans.

2) KPIs must be relevant to the borrower's overall business and do not include philanthropic or promotional activities. The ICMA (2024.6) "Illustrative KPIs Registry" and Annex 4 can be used as a reference when setting KPIs.

[34] Calculation methodology should follow international standards and science-based methodologies where available.

2. Calibration of SPTs

【Sustainability-Linked Loan Principles】

The process for calibration of the SPT(s) per KPI is key to the structuring of SLLs, since it will be the expression of the level of ambition the borrower is ready to commit to.

The SPTs must be set in good faith and remain relevant (so long as they apply) and ambitious throughout the life of the loan. It is therefore recommended that an annual SPT should be set per KPI for each year of the loan term. In instances where strong rationale is provided as to why this is not appropriate, exceptions to the annual frequency of SPTs can be agreed between the borrowers and lenders.

The borrower should, where possible and taking competition and confidentiality considerations into account, also highlight any strategic information that may decisively impact the achievement of the SPTs.

The SPTs should be ambitious, and take into consideration the following factors:

- represent a material improvement in the respective KPIs and be beyond both a “business as usual” trajectory and regulatory required targets;
- where possible be compared to a benchmark or an external reference;
- be consistent with the borrower’s overall sustainability strategy; and
- be determined on a predefined timeline, set before or concurrently with origination of the loan.

Market participants recognise that any SPTs should be based on recent performance levels and be based on a combination of benchmarking approaches:

• the borrower’s own performance over time, for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is recommended;

• the borrower’s peers, i.e. the SPT’s relative positioning versus its peers’ where available (average performance, best in class sector standards; and/or

• reference to the science, i.e. systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets), or to official country/regional/international targets (Paris

Agreement on Climate Change, net zero goals, Sustainable Development Goals, etc.) or to recognised best available-technologies or other proxies to determine relevant targets across ESG themes.

【Guidance】

【Definition of Ambition】

1) As stated in the Sustainability-Linked Bond Principles, where possible, forward-looking guidance on the selected KPI may be included as a benchmarking approach in calibration of SPTs.

2) 'Regulatory required targets' in principle, refer to targets and standards in regulations or plans set by regulatory bodies. (e.g., automobile emission regulations under the Air Pollution Control Law and various other environmental laws and regulations; GHG reduction targets in the Global Warming Prevention Plan) However, there are also cases where targets and standards set by international organizations or industry associations (e.g., ICAO, IMO, etc.) may be perceived as equivalent by the market. It is recommended to clearly explain the rationale for referring to such targets and standards, taking into account the nature of the targets or standards (e.g., whether they are minimum requirements or standards that set out the goal to be achieved), as well as how well they are perceived in the market.

3) Specific examples of SPTs may include those described in Annex 4.

[Exceptions to the annual setting of SPTs]

4) Exceptions to the annual setting of SPTs may include the following scenarios;

- Situations where significant external factors are beyond the borrower's direct control (e.g. the borrower can set SPTs for triggering events, such as CO2 emission reductions, but it is objectively evident that setting annual SPTs is challenging due to external factors).
- Instances where competitive considerations, such as sales strategies and the protection of confidential information, should be prioritized (e.g. disclosing the amount and timing of CO2 emission reductions could inadvertently reveal confidential plans to shut down current facilities or install new facilities).
- Where it is objectively determined that, due to some factors, no significant annual change

in the performance of a KPI is expected up to a certain point in time, and until a significant change is expected (e.g. where the company plans to reduce CO2 emissions through major capital investment during the period of the loan and no significant emission reductions are expected until such capital investment is made).

5) In cases where the annual setting of SPTs is difficult, it is important, in terms of integrity, for the borrower and lender(s) to communicate the reasons for why the SPTs cannot be set annually and when will be appropriate timing for the SPT setting, which can help drive discussions regarding the sustainability transition plan of the borrower.

【Sustainability-Linked Loan Principles】

Information provided to lenders with respect to target setting should make clear reference to:

• the timelines for the target achievement, including the target observation date(s)/period(s), the trigger event(s) and the frequency of review of the SPTs;

• where relevant, the verified baseline or science-based reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used (including date/period);

• where relevant, in what situations pro-forma adjustments or recalculations of baselines and/or recalculation of KPIs and subsequent SPTs will take place;

• where possible and taking competition and confidentiality considerations into account, how the borrower intends to reach such SPTs, e.g. by describing its ESG strategy, supporting ESG governance and investments, and its operating strategy, i.e. through high lighting the key levers/ type of actions that are expected to drive the performance towards the SPTs as well as their expected respective contribution, in quantitative terms wherever possible; and

• any other key factors beyond the borrower's direct control that may affect the achievement of the SPTs.

Appropriate KPIs and SPTs should be determined and set between the borrower and lender group for each transaction. A borrower may elect to structure its SLL with the assistance of one or more "Sustainability Coordinator(s)"[35] and, where appointed, they will assist with providing

[35] This role may be referred to as a Sustainability Coordinator or Sustainability Structuring Agent.

market colour regarding the KPIs and SPTs to the borrower, and facilitate the dialogue between the borrower and the lender group in regard to substantiating the SPTs and answering the ESG-related questions the prospective lender group might have.

It is recommended, where appropriate, that borrowers seek input from an external party[36][37], via e.g. a pre-signing Second Party Opinion (SPO) or KPI/SPT assessment. In their pre-signing SPO, external reviewers should assess the relevance, robustness and reliability of selected KPIs, the rationale and level of ambition of the proposed SPTs, the relevance and reliability of selected benchmarks and baselines, and the credibility of the strategy outlined to achieve them, based on scenario analyses, where relevant. Post-signing, in case of any material change to parameters/ KPI methodology/ SPT(s) calibration, borrowers are encouraged to ask external reviewers to assess these changes.

【Guidance】

【Relevance of KPI/SPTs and External Review】

6) From the perspective of improving the credibility of sustainability-linked loans, it is recommended that borrowers refer to measures and initiatives they envisage for achieving the predefined SPTs, while taking competition and confidentiality considerations etc. into account. However, if the means of achieving the SPTs have not been defined at the time of financing, they may be defined through engagement with the lender, i.e. the financial institution.

7) It is important for KPI and SPTs to be objective and the borrower is recommended to seek third party reviews on the relevance of its content.

8) The qualification requirements for external reviewers are essentially the same as those required of external reviewers in Green Loans. The external reviewers may be auditors, environmental consultants, or independent rating agencies.

[36] The SLLP encourage external reviewers to disclose their credentials and relevant expertise and communicate clearly the scope of the review(s) conducted.

[37] See APLMA, LMA and LSTA Guidance for Green, Social, and Sustainability-Linked Loans External Reviews.

【Sustainability-Linked Loan Principles】

In cases where no external input is sought, it is strongly recommended that the borrower demonstrates or develops the internal expertise to verify its methodologies. Borrowers are recommended to document thoroughly such expertise, including the related internal processes and expertise of their staff. This documentation should be communicated to lenders participating in the loan on request.

【Guidance】

【Internal review and prior explanation and report to lenders】

9) For a borrower to claim financing through Sustainability-Linked Loans, and to gain public recognition and acceptance as such, it will be necessary to ensure transparency on sustainability, and therefore are encouraged to publicly disclose information on the self assessment results of Sustainability-Linked Loans.

3. Characteristics of Loans

【Sustainability-Linked Loan Principles】

A key characteristic of a SLL is that an economic outcome is linked to whether the selected predefined SPT(s) are met. For example, the margin under the relevant loan agreement will often be reduced where the borrower satisfies a pre-determined SPT as measured by the pre-determined KPIs and vice versa, and, in some cases, where a strong rationale is provided, the ratchet may include a neutral bracket in which no margin adjustment applies.

【Guidance】

【Linking with loan terms, etc.】

1) If the linkage with the lending conditions does not necessarily seem to work as an incentive, other linkages may also be considered. In any case, it should serve as a sufficient incentive for borrowers to improve their own sustainability.

＜Example of linked lending conditions＞

*Possible examples are not limited to the following

-In the case of short-term loans that are renewed every year, the interest rate can be reduced if the SPTs, set in advance

by the borrower, are met in accordance with the relevant loan agreements, or raised if the targets are not met.

-In the case of long-term loans with maturities exceeding one year, interest rates or loan-related commissions can be reduced at the time when the borrower achieves the SPTs set in advance, or can be increased if they are not achieved at the time of periodic loan condition review agreed between the borrower and the lender. Other loan conditions may include, but are not limited to, an extension of the lending period and an increase in the amount of loans.

-At the time of the achievement of the SPTs, disclose the information that the SPTs have been achieved and that the company is an active enterprise in sustainability management on the lender's website, etc.

-Acquire opinions and or reviews from external review providers, indicating the achievement of SPTs or an improvement in sustainability management.

-If the borrower fails to achieve the SPTs, efforts will be made to contribute to the improvement of social sustainability, for example, by the borrower contributing an amount equivalent to the interest rate raised.

4. Reporting

【Sustainability-Linked Loan Principles】

Borrowers should, at least once per annum, provide the lenders participating in the loan with:

• up-to-date information sufficient to allow them to monitor the performance of the SPTs and to determine that the SPTs remain ambitious and relevant to the borrower's business; and

• a sustainability confirmation statement with verification report attached, outlining the performance against the SPTs for the relevant year and the related impact, and timing of such impact, on the loan's economic characteristics.

【Guidance】

【Reporting to the lender and general disclosure】

1) The first point above, sufficient "up-to-date information," includes information on the achievement of SPTs, such as ESG ratings, by an external party.

2) It is necessary that reporting enables lenders to determine whether the SPTs are ambitious and relevant to the borrower's business and to monitor SPTs performance of borrowers. Therefore, it is important that the lenders and the borrower agree in advance on the way of reporting that meets the above.

【Sustainability-Linked Loan Principles】

As transparency is of particular value in this market, borrowers are encouraged to publicly report information relating to their SPTs, including details of any underlying methodology of SPT calculations and/or assumptions. This information will often be included in a borrower's integrated annual report or sustainability report. However, this will not always be the case and, where appropriate, a borrower may choose to share this information privately with the lenders rather than making this publicly available.

【Guidance】

【Reporting to the lender and general disclosure】

3) As a borrower, it is necessary to ensure transparency in order to claim and advocate the loan is a Sustainability-Linked Loan and to gain the support of society. To this end, borrowers are encouraged to publicly disclose information on their SPTs when claiming that their loans are sustainability-linked loans so that third parties can evaluate their progress. Such information may be included in the borrower's annual report, CSR report and/or environmental report, or posted on the borrower's website or the Green Finance Portal, etc.

4) For example, a borrower may choose to share this information privately with the lenders, due to competitive considerations.

5. Verification

【Sustainability-Linked Loan Principles】

Borrowers must obtain independent and external verification of the borrower's performance level against each SPT for each KPI for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLL economic characteristics, until after the last SPT trigger event of the loan has been reached.

This is a necessary element of the SLLP and should be conducted by a qualified external reviewer with relevant expertise, such as an auditor (by way of limited or reasonable assurance), environmental consultant and/or independent ratings agency.

The verification of the performance against the SPTs must be shared with the lenders in a timely manner and, where appropriate, be made publicly available.

As opposed to pre-signing external review, which is recommended, post-signing verification is a necessary element of the SLLP.

Once reporting has been completed and verification has taken place, the lenders will evaluate the borrower's performance against the SPTs and KPIs based on the information available.

【Guidance】

【General information】

1) The level of verification is adjusted individually by borrowers and lenders.

2) The qualification requirements for external reviewers, which conduct verification, are essentially the same as those required of external reviewers in Green Loan Guidelines. On the other hand, the external review for appropriateness of KPIs and/or SPTs described in "2. Calibration of SPTs" and external verification described in "5. Verification" may address different content, and thus may require different expertise.

【Exception of the verification】

3) On the premise that SPTs meet the requirements above, there may be cases where verification for each SPT might not require additional steps to be taken by the parties (for example, where the information is already subject to annual verification by an independent and external organisation, such as a regulator).

Chapter 4 Expected Procedures for Lenders

A characteristic of Green Loans is that the loan proceeds are limited to Green Projects, that will have environmental benefits. Annex 1 of these Guidelines sets out judgement criteria to determine the projects that can be classified as Green Projects with explicit environmental benefits. The table in Annex 1 shows some illustrative examples of Green Projects.

Furthermore, Sustainability-Linked Loans are characterized by their linkage between the borrower's sophistication of sustainability management and the terms of the corporate finance. Some examples are given in Annex 4 of the Guidelines, showing SPTs that are ambitious and meaningful in terms of the materiality of the business of the subject borrower.

It should be noted that these are just possible examples, and the final decision on whether to provide funds for the Green Loans and Sustainability-Linked Loans is left to the lenders. Therefore, the roles of lenders will be extremely important for the sound expansion of Green Loans and Sustainability-Linked Loans in Japan.

First, in order for loans to generate environmental benefits and positive impacts, it is important for lenders to have their own intentions in investment and to embody these intentions in their own strategies. Lenders' manifestation of their strategies aiming for positive impacts will be a driver of this market.

Based on the above, it is recommended that, when making investment decisions concerning Green Loans, lenders appropriately assess whether the project for which the proceeds of the relevant Green Loans are to be used has any environmental benefit, the magnitude of its impact and other relevant factors. With regard to Sustainability-Linked Loans, it is recommended that appropriate assessments are made regarding whether the levels of SPTs are ambitious and meaningful enough, and the magnitude of their impacts on sustainability.

When doing so, lenders are recommended to note that Annex 1 and Annex 4 are just examples and that they should make decisions on a case-by-case basis even for the kinds of projects included in those Annexes. Each decision should be based on factors such as the conditions surrounding each project, negative impact if any, as well as international trends,

through the explanations and self-evaluation by the borrower or external reviews.

Where an external review is provided, lenders are recommended to carefully consider the documents concerning the external review results and to make final loan decisions based on their own appropriate evaluation of the relevant Green Loans or Sustainability-Linked Loans without solely relying on the external review. Furthermore, after executing the Green Loans or Sustainability-Linked Loans, lenders are recommended to continue close communication with borrowers and encourage disclosure if necessary, and to appropriately monitor, how the borrower has managed the loan proceeds, whether the expected impact has been achieved, and if the situation has changed.

To achieve the above, lenders need to have sufficient ability to make appropriate decisions. Accordingly, it is recommended that lenders have considerable insights regarding sustainable development, accumulate knowledge on Green Projects and sustainable management, and also pay full attention to international trends.

These are necessary for lenders to gain support from society as financial institutions executing ESG loans, which leads to the sound development of green finance and sustainable finance, as well as to the establishing of a sustainable society.

Chapter 5 Revision of the Guidelines

Given the objective to further develop the markets for Green Loans and Sustainability-Linked Loans, these Guidelines will be revised in response to the growth of the Japanese market, rapidly changing international trends, and any other changes that may occur.

Annex 1 Guidance on Eligibility Criteria for Green Projects with Clear Environmental Benefits

The Green Bond Principles of the International Capital Market Association (ICMA) state that eligible green projects to be financed by green bonds should have clear environmental benefits and that these benefits will be assessed and, where feasible, quantified by the issuer. Therefore, the Green Bond Guidelines of Japan state that the proceeds of green bonds should be allocated to green projects that have clear environmental benefits, and that the issuer should assess these environmental benefits and, where feasible, the issuer is recommended to quantify them. In addition, the guidelines state that financial markets ultimately evaluate the appropriateness of the green bond, including its use of proceeds. Similarly, the Green Loan Guidelines state that the parties participating in the green loan ultimately evaluate its appropriateness.

There are various pathways to realise a sustainable society; therefore, there are multiple perspectives from which fundraisers themselves may assess whether the green project is eligible and has clear environmental benefits. The following points aim to help fundraisers conduct preliminary evaluations of their green projects. These are for reference and green projects do not necessarily have to meet all four points. However, it is recommended that the respective points be comprehensively assessed depending on the nature of the project.

Eligibility Criteria for Green Projects

(1) It can be logically explained that the output achieved through the implementation of the project will lead to achieving the intended environmental objectives and generating positive impacts through green bonds/green loans.

(2) It is objectively evident that environmental benefits will be generated through the project implementation. This may include that projects are expected to clearly improve indicators used to measure environmental benefits compared to the "Business as Usual (Business as usual refers to the situation not implementing a green project and/or not changing current business operation) " approach or to materially improve the environment in terms of socioeconomic

conditions, such as introducing renewable energy facilities in the field of climate change mitigation.

(3) Where long-term project-implementation goals exist at the global, country, regional, or sector levels where the issuer/borrower is located or where the project is implemented, there is consistency between the implementation of the project in question and the achievement of these long-term goals—achieving carbon neutrality in Japan by 2050—in principle and there is no apparent inconsistency.

(4) The project has a process for identifying, mitigating, or managing any negative impacts that may be caused by project implementation apart from the intended environmental benefits.

The following Green List was developed based on evaluation criteria, national and international knowledge, and issuance records. The Green List includes examples of the use of proceeds, KPIs, and negative environmental impacts. The items on the Green List illustrate what can be considered green projects, building on the eligible green project categories provided in Green Bond Principles of the ICMA, as well as current Japanese market practices.

The Green List shows a series of indicative examples, and is not intended to be exhaustive. Therefore, eligible green projects are not limited to these examples. Referring to the guidance above, fundraisers need to assess projects on a case-by-case basis, including those that are not explicitly included on the Green List, and their eligibility may be controversial. Additionally, some projects not explicitly contained in the Green List could be eligible green projects in the future as markets and international trends evolve over time, or vice versa. Therefore, it is necessary to pay close attention to broader market trends and development of international practices when evaluating project eligibility.

As stated in the reporting section of the Green Bond and Green Loan Guidelines, it is important to disclose the expected and/or achieved environmental impacts transparently. When making such disclosures, it is recommended to use quantitative performance indicators, where feasible, and disclose them together with the underlying methodology and/or assumptions used in the quantitative calculation. Investors and financial institutions have initiated the calculation of

financed emissions, aimed at net-zero emissions in national and international markets. They see the importance of quantifying environmental impacts.

In terms of negative impacts, this is also an indicative list of the expected major negative impacts from an environmental perspective. Depending on the type of project, there may be other negative environmental and social impacts; therefore, it is important to evaluate each case individually.

When identifying, mitigating, and managing the negative environmental and/or social impacts of a green project, fundraisers may refer to relevant national and international policies. For example, the "due diligence guidance for responsible business conduct" developed by the Organization for Economic Co-operation and Development (OECD) and the "introduction to environmental due diligence in the value chain"[38] developed by the Ministry of the Environment Japan—which is in line with the OECD's Guidance—can be useful when identifying, mitigating, and managing overall negative impacts, including social aspects.

Another useful reference approach is the table for environmental impact assessment provided in the Environmental Impact Assessment Act[39,40], which aims to help assess environmental impacts. The table comprises a combination of environmental impact factors—maintaining a good state of the natural components of the environment, such as air and water; ensuring biodiversity and systematic conservation of the natural environment; and reducing environmental impacts—and business stages, such as in the construction and operation phases. In addition, local governments may have their own ordinances for environmental impact assessments[41] that can be applied to projects in certain areas or above a certain size. With this

[38] See the following.
OECD Due Diligence Guidance for Responsible Business Conduct (Japanese version)
https://www.mofa.go.jp/mofaj/files/000486014.pdf
Introduction to Environmental Due Diligence in the Value Chain: Using the OECD Guidance as a Reference
https://www.env.go.jp/content/900497033.pdf (available only in Japanese)
[39] Projects subject to environmental assessment under the Environmental Impact Assessment Act include 13 types of projects such as roads, dams, railways, airports and power plants.
Environmental Impact Assessment Information Support Network: Projects Subject to Environmental Impact Assessment
http://assess.env.go.jp/1_seido/1-1_guide/1-4.html
[40] Basic Matters Based on the Environmental Impact Assessment Act (Notification No. 87 of the Environment Agency) Appended Table
http://assess.env.go.jp/files/1_seido/1-3_horei/3_seitei/3/kihon.pdf
[41] Environmental Impact Assessment by Local Governments http://assess.env.go.jp/1_seido/1-4_jichitai/index.html

in mind, when considering market value impacts, such as those on the entire life cycle, including the procurement and disposal phases, it is important to identify, mitigate, and manage negative impacts according to individual cases.

Green projects may work synergistically with other environmental, economic, and social objectives. To achieve a net-zero, circular, and nature-positive economy in an integrated manner, it is important to pay attention to the synergy brought about by green projects as well as the negative effects mentioned above.

The examples in this list will be continuously reviewed in light of the development of market practices in Japan and overseas as well as fast-changing international trends.

Appended Table (commonly known as the "Green List")

Note 1: Regarding negative environmental impacts, the main expected impacts are listed; depending on the nature of the business, there may be other negative environmental impacts, and negative social impacts may also be expected; therefore, it is important to consider each case individually.

Note 2: It is important to consider the entire life cycle when evaluating the environmental benefits and negative environmental impacts.

Note 3: While in principle absolute value is used for specific indicators in the calculation of environmental benefits, decisions need to be made on a case-by-case basis because there are cases where the information that can be disclosed is limited owing to confidentiality agreements or competitive considerations, or where the base unit or change amount is more appropriate depending on the nature of the project..

Note 4: When confirming the measures to be taken to reduce greenhouse gas emissions, refer to the measures specified in the Guidelines for Emission Reduction based on Article 25 of the Act on the Promotion of Global Warming Countermeasures (Act No. 117 of 1998).

Note 5: The Green Project includes relevant expenditures such as assets, investments, research and development, and demonstrations, and others and incidental expenditures.

Major Category 1: Renewable Energy (including production, transmission, appliances and products)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
1-1	Businesses that generate electricity from renewable energy sources such as solar, wind (including offshore wind), hydroelectric, biomass (limited to those that are certified sustainable or from waste), geothermal, and ocean renewables such as wave and tidal	● Amount of CO2 emissions reduced or avoided (t-CO2) ※Calculated by comparing the CO2 emissions (t-CO2) that would have been produced in the case of not implementing the business or in the case of letting things take their natural course, with the CO2 emissions (t-CO2) after the business has been implemented ● Amount of electricity generated from renewable energy sources by facilities built by the business (GWh) ● Percentage of renewable energy used in manufacturing processes (%) ※Compare the rate of renewable energy use in the manufacturing process (the amount of renewable energy used as a proportion of total energy used) before and after the deal is implemented ● Renewable energy generation capacity of facilities built by the business (GW)	[Solar Power] ● Collapses due to surface erosion caused by land development or installation on natural slopes, creation of muddy water, and noise from ancillary equipment such as power conditioners ● Effects of reflected light from panels ● Adverse landscape impacts ● Reduction in habitat and breeding environment of important flora and fauna due to land modification ● Adverse impacts due to neglect or improper disposal of power generation equipment and increased landfill disposal [Wind Power (Onshore)] ● Noise caused by the operation of wind turbines ● Shadows cast by wind turbines ● Impact on bird strikes, foraging, and breeding ● Landscape impacts ● Reduction in the habitat and breeding environment of important flora and fauna due to land modification (In the case of offshore wind, the following should also
1-2	Businesses that install and maintain power lines to transmit electricity generated by renewable energy sources and batteries to store electricity, and perform tasks such as maintenance and management, balancing supply and demand, and energy storage		
1-3	Businesses that manufacture equipment used in the above businesses, such as solar panels, power lines, and storage batteries		
1-4	Businesses that use renewable heat,		

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	such as solar and ground source heat		be considered) ● Changes in marine ecosystems ● Impacts on marine life [Hydropower] ● Contamination and eutrophication of water in reservoirs ● Reduction in the habitat and breeding environment of important flora and fauna due to land modification [Biomass] ● Increased greenhouse gas emissions throughout the life cycle of biomass fuel, air pollution from factories and delivery vehicles, negative environmental impacts in fuel production areas such as illegal logging, land-use changes such as peatland development and indirect land-use changes, water pollution from factories effluents, negative impacts on marine ecosystems from thermal discharges, noise, odors from fuel storage, and food competition [Geothermal] ● Impacts of hydrogen sulfide odors and impacts on hot springs
1-5	Businesses that use renewable energy to power all or part of their offices, factories, homes, and data centers		
1-6	Businesses that provide ICT solutions (maintenance and management systems, operational systems, optimal coordination of supply and demand) that contribute to renewable energy		

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
			[Ground source heat] ● When pumping groundwater, there is a risk of land subsidence, depending on groundwater and geological conditions [General] ● Discharge of harmful chemicals and other substances generated during the manufacturing process of equipment into the general environment ● Adverse impacts on the surrounding area, such as muddy water, noise, and vibration caused by construction work ● Impact on places where people interact with nature (parks and trails) In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business

Major Category 2: Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
2-1	Businesses that construct or renovate buildings with high energy-saving performance, such as offices, factories, homes, and data centers ※Obtaining environmental certifications such as BELS, ZEH (Net Zero Energy House), and ZEB (Net Zero Energy Building), and other matters related to the construction of new buildings or the renovation (including thermal insulation renovation) of buildings with high energy-saving performance	● Amount of CO2 emissions reduced (t-CO2) ※Calculated by multiplying the reduction amount, which is the difference between the amount of energy use (MJ) that would be expected without the business and the amount of energy use after the business, by the CO2 emission factor (t-CO2/MJ) ● Amount of energy consumption reduction (MJ) ※Calculated by comparing the estimated energy consumption (MJ) in the case of not implementing the business with the energy consumption (MJ) after implementing the business. ● Type and evaluation of environmental certifications such as BELS, ZEH, and ZEB obtained for buildings related to the business ● Number of energy-saving devices (e.g., LED lighting, high-efficiency chillers and air conditioners, heat pumps, high-efficiency boilers) and energy-saving products installed	● Adverse impacts on the surrounding community, such as noise, vibration, and light pollution from construction activities, and the dispersal of hazardous waste such as asbestos ● Adverse impacts of improper disposal of equipment and facilities prior to replacement ● Increased energy consumption over the entire life cycle, including the operation of communications technology In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business
2-2	Businesses that introduce equipment and facilities with high energy-saving performance in offices, factories, homes, and data centers		
2-3	Businesses that introduce equipment related to the effective use of energy on a regional scale, such as energy		

	storage, district heating and cooling, and smart grids		
2-4	Businesses related to the provision of ICT solutions (BEMS, HEMS, CEMS, ITS, and supply chain management) that contribute to energy savings, or the introduction of communication technologies with high energy-saving performance		

※New construction or renovation with high energy-saving performance listed in 2-1 that obtain environmental certification may be included as part of 10-1 in practice.

Major Category 3: Pollution prevention and control (includingreduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
3-1	Businesses that aim to optimize the entire life cycle at each stage of resource extraction, production, distribution, use, and disposal to achieve a circular economy. This includes the design and manufacture of resource-efficient, durable products; the use of materials, such as recycled materials and renewable resources, that have a positive impact on reducing environmental impacts; cooperation between the "artery" and "vein" industries, including the active use of recycled materials by manufacturers and the supply of recycled materials by recycling companies; the reduction of food loss and waste; and advanced collection and processing of waste (recycling promotion facilities and waste	● Amount of landfill waste reduced through business implementation (t) ※Calculated by comparing the amount of landfill waste that would have been generated without the business (t) with the amount of landfill waste generated after the business (t) ● Amount of waste recycled (t/t) ● Recycling rate of materials generated by the business (%) ● Amount of reduction in waste generated before and after implementation of the business (t) ● Reduction rate of by-products and waste sent to landfill or incinerated (%) ● Percentage of renewable resources used (%) ● Percentage of resources recovered and recycled by type of recovery/reuse (reuse, repair, recycling, refurbishment) (%) ● Total amount of raw materials used relative to sales (t/yen) ● Amount of reduction of CO2 emissions (t-CO2)	● Adverse impacts from spills, leaks, or improper disposal of Toxic substances (%) ● Air pollution from waste disposal and contaminated soil, and water pollution from wastewater ● Increased environmental impacts, such as greenhouse gas emissions, over the life cycle due to inefficient recycling ● Adverse impacts from improper disposal of sludge containing toxic substances such as heavy metals ● Adverse impacts caused by improper disposal of contaminated soil In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	treatment facilities with energy recovery)		
3-2	Businesses that reduce the discharge of Toxic substances into the environment (including the marine environment) through the introduction of advanced equipment and technologies related to the prevention of leakage, volatility, and permeation of Toxic substances, and the use of alternative products	● Types and quantities (t) of Toxic substances reduced by introducing alternative substances ● Amount of emissions of water pollutants (toxic substances [e.g., cadmium], chemical oxygen demand [COD], biochemical oxygen demand [BOD]) reduced by the business into public waters (t) ● Amount of emissions of air pollutants (sulfur oxides [Sox], soot and dust, nitrogen oxides [NOx], volatile organic compounds [VOCs], mercury and hazardous air pollutants (trichloroethylene, dioxins)) reduced by the company into the atmosphere (t) ● Number of cases in which water treatment technology that contributes to the preservation of ecosystems has been introduced (e.g., number of cases in which ballast water treatment systems with high environmental benefits have been introduced)	
3-3	Businesses that design or manufacture products that contribute to the reduction of fluorocarbon emissions	● Amount of reduction of fluorocarbon emissions (t-CO2 equivalent) ※Calculated by comparing the amount of fluorocarbon emissions that would have been expected in the absence of the businesses (t-CO2 equivalent) with the amount of fluorocarbon emissions after the business is implemented (t-CO2 equivalent)	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
3-4	Businesses related to the advanced treatment and reuse of wastewater from industries and the construction of sewerage facilities with high environmental benefits and improvements to combined sewer systems	● Reduction of energy consumption (MJ) ● Reduction of CO2 emissions (t-CO2) ● Improved sludge recycling rate (%) ● Combined sewage improvement rate (%) ● See relevant items in 3-2	
3-5	Businesses that treat contaminated soil	● Amount of reduction in environmental impacts associated with the treatment of contaminated soil (e.g., amount of water pollutants discharged into public waters [t], amount of air pollutants discharged into the atmosphere [t])	
3-6	Businesses that contribute to the prevention of pollution from plastic waste	● Plastic reuse rate (%) ● Effective recovery rate of used plastic (%) ● Percentage of end-of-life biodegradation (or recycling) (%) ● Percentage reduction of microplastic emissions from products (%)	
3-7	Businesses that provide ICT solutions that contribute to the prevention and control of water and air pollutants, Toxic substances, and waste management	See indicators for relevant topics	

Major Category 4:Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
4-1	Businesses related to sustainable agriculture (environmentally friendly agriculture such as organic farming and drip irrigation)	● Area of farmland managed using sustainable methods (ha) ※, agricultural production using sustainable methods (t) ※ ※Acquisition of JAS organic certification, compliance with the Organic Agriculture Promotion Act and standards for specially cultivated agricultural products ● Reduction in risk-weighted use of chemical pesticide and chemical fertilizer use (t)	Be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business
4-2	Businesses related to sustainable fisheries and aquaculture	● Acquisition of certifications that include biodiversity and ecosystem considerations (e.g., number of MEL, MSC, or ASC certifications acquired, or volume of certified seafood handled)	
4-3	Businesses related to sustainable forest management	● Forest management plan area (ha), forest improvement area in forests with forest management plans (ha), wood production (m^3) ● Area (ha) of forests certified by private organizations for sustainable forest management (FSC certification, SGEC/PEFC certification), area (ha) of forest improvement in certified forests and wood production (m^3) ● Amount of CO2 absorbed by forests (t-CO2) ● Forest species diversity, forest stock, and understory vegetation	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
		rate	
4-4	Businesses related to the conservation and restoration of natural landscapes	● Area (km^2) where urban environment has been improved to address climate change and biodiversity through measures such as improving land cover and vegetation in urban development ● Amount of carbon fixed (t-CO2)	
4-5	Businesses undertaken by or in cooperation with local governments to maintain and create urban green spaces and waterfronts, and to create water and green networks	● Change in area of green and water amenity space before and after implementation of the business (km^2)	
4-6	Businesses that contribute to reducing the burden on natural resources	● Amount of reduction in ecological footprint of target area before and after implementation of the business (gha) or amount of reduction in value obtained by subtracting carbon footprint from ecological footprint (gha) ● Amount of reduction in the ecological footprint of the target area before and after the introduction of the product or service (gha) or amount of reduction in the value obtained by subtracting the carbon footprint from the ecological footprint (gha) ● Amount of reduction in the amount of environmental impact assessed by LIME (Life cycle Impact assessment Method based on Endpoint modeling; Japanese version of the damage calculation-based environmental impact assessment method) in the target area before and after implementation of the business (EINES	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
		[Expected Increases in Number of Extinct Species]) ● Amount of reduction in the amount of environmental impact assessed using LIME in the target area before and after the introduction of products and services (EINES; expected increase in the number of species going extinct as a result of environmental impacts)	
4-7	Businesses that provide ICT solutions that contribute to the sustainable management of natural resources and land use (including traceability systems related to the sustainability of agricultural, forestry and marine resources, and forest management systems)	See the relevant position indicators	

Major Category 5: Terrestrial and aquatic biodiversity (including the protection of coastal, marine, and watershed environments)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
5-1	Businesses that conserve and restore the health of ecosystems in protected areas and OECM (Other Effective area-based Conservation Measures) - Forest ecosystems: Maintenance and conservation of forests that are balanced and arranged in a mosaic pattern, comprising various growth stages and tree species, from the perspective of realising the multiple functions of forests (appropriate forest maintenance based on the forest plan system, inducing a transition to an uneven-aged mixed conifer and broadleaf forest by introducing broadleaf trees in a simple-storied forest, forest operations that consider the conservation of biodiversity, such as the appropriate conservation and management of natural forests and	-Area (km^2) of protected areas and OECM (Nationally Certified Sustainably Managed Natural Sites etc.) maintained or increased by the business -Area (km^2) of representative ecosystems where appropriate conservation and management has been conducted, and number of species and diversity of flora and fauna (excluding non-native species), as well as their habitat and growth conditions -Forest ecosystems: Species diversity, forest stock, percentage of vegetation cover in the understory vegetation, number of species, and frequency of confirmation of mammals, birds, and insects that represent the forest ecosystem etc. -Agricultural ecosystems: Number of species of birds, amphibians, and insects that represent the agricultural ecosystem and frequency of confirmation etc. - Urban ecosystems: Number of species of birds and insects that represent urban ecosystems and frequency of confirmation etc. -Freshwater ecosystems (rivers, lakes and marshes, wetlands): number of species of birds, amphibians, and fish that represent freshwater ecosystems and frequency of confirmation etc. -Coastal and marine ecosystems (tidal flats): Number of species	Adverse impacts on ecosystems from large-scale land reclamation Adverse impacts on species other than those being monitored Introduction of non-native species into the target area and disturbance of the gene pool etc. In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	the protection of valuable wildlife etc.) -Farmland ecosystems: Reducing the use of chemical fertilizers and the risks posed by the use of chemical and pesticides in agriculture, promoting organic farming, reducing environmental impacts through proper management of livestock waste, maintaining the overall mosaic of the rural landscape, including waterways, ridges and windbreaks that provide habitat, growth and breeding grounds for a wide range of organisms, and reclamation of dilapidated farmland and abandoned fields etc. -Urban ecosystems: Development of urban parks, preservation of green spaces, and creation of attractive waterfronts etc. -Freshwater ecosystems (rivers, lakes, marshes): Initiatives to restore rivers to a more natural state, and maintain and create habitats for the growth and	and frequency of confirmation of sandpipers and plovers, number of species and density of benthic organisms, and number of seabird nests etc. - Coastal and marine ecosystems (seaweed beds): Number of species of seaweed beds and seagrass beds, number of species of fish and other animals, and frequency of confirmation etc. -Coastal and marine ecosystems (corals): Number of coral species, number of species and frequency of fish confirmation etc. ※The term "frequency of confirmation" refers to the average number of confirmations per unit of effort. For example, the average number of target species that can be confirmed per year at a single site Ecosystem Continuity and Ecosystem Network Index Amount of carbon absorbed by ecosystems (t-CO2)	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	reproduction of organisms and diverse landscapes etc. -Coastal and marine ecosystems: Conservation, restoration and creation of marine environments such as seagrass beds, mudflats, and coral reefs in conjunction with measures to increase fishery resources and/or use blue carbon as an absorption source etc. (including initiatives related to blue infrastructure)		
5-2	Businesses related to the conservation of threatened species (including in situ and ex situ conservation)	● Recovery status of threatened species (number of individuals/habitats/localities/other indicators) ● Area/number of sites where conservation/improvement of habitats is being conducted ● Number of species/populations being bred, cultivated, or reproduced ● Number of threatened species/populations for which seeds and germ cells are being preserved	The following negative impacts associated with inappropriate reintroduction into the wild ● Disturbance of ecosystems/populations (disturbance/competitions/others of species interactions) ● Disturbance of genetic diversity and population characteristics of in situ populations ● Transmission/unintentional introduction of pathogens and parasites. Unintentional introduction of non-native species In addition, be aware of cases where there may be

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
			negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business
5-3	Businesses that contribute to the prevention and reduction of negative impacts of invasive alien species	● Capture Per Unit Effort (CPUE) of invasive alien species ● Area occupied by the invasive alien species (m² or km², before and after implementation of the business) ● Population of the invasive alien species identified in the area affected by the invasive alien species (before and after implementation of the business to control invasive alien species), and number or population of rare or native species identified in the area affected by the invasive alien species (selected by the control body) (before and after implementation of the business to control invasive alien species) ● Number of invasive alien species control plans developed for affected areas ● Number of cases in which measures such as control were promptly taken when invasive alien species were newly confirmed in business target areas	● Adverse impacts on the ecosystem, such as the scattering of seeds when cutting invasive plants In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business
5-4	Businesses that maintain an appropriate distance from wild birds and animals and contribute to the	● Estimated population size (number of individuals) of wild birds and animals ● Capture Per Unit Effort (CPUE) for wild birds and animals	● Negative environmental impacts such as lead poisoning in wild birds caused by lead bullets used in the control of wild birds and animals

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	mitigation of wildlife damage	● Number of confirmed cases of mass mortality of wild birds and animals or adverse impacts on rare birds and animals threatening the survival of the species due to infectious diseases affecting wild birds and animals	In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business
5-5	Businesses providing ICT solutions that contribute to biodiversity conservation (ecosystem monitoring using satellites, flying objects, IoT, wildlife damage prevention systems, and biodiversity data analysis)	See indicators for related topics	See related items

Major Category 6: Clean transportation (such as including electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
6-1	Businesses that manufacture and introduce electrified vehicles (electric vehicles, fuel cell vehicles, plug-in hybrid vehicles, hybrid vehicles), trains, bicycles, and zero-emission ships (hydrogen fuel cell ships, battery ships), and develop the infrastructure necessary for their use	● Amount of CO2 emissions reduced or avoided (t CO2) ※Calculated by comparing the amount of CO2 emissions that would have been emitted in the case of not implementing the business or in the case of letting things take their natural course (t-CO2) with the amount of CO2 emissions after implementing the project (t-CO2) ● Share of electrified vehicles in new car sales (%) ● Passenger transportation capacity ※Number of passengers (persons) x distance traveled (km), or number of passengers, or total transportation volume (t) x distance traveled (km), or total transportation volume (t) ● Estimated amount of CO2 emissions reduced by the business (t-CO2) ● Changes in road and rail traffic due to business implementation ● Reduction of air pollutants (e.g., particulate matter [PM], sulfur oxides [SOx], nitrogen oxides [NOx], carbon monoxide [CO], and non-methane volatile organic compounds [NMVOCs])	● Adverse impacts on ecosystems from large-scale land reclamation ● Adverse environmental impacts from inappropriate mining, use and disposal of metals such as rare metal ● Increased noise, vibration, and air pollution due to concentration in certain locations or periods of time ● Noise and waste near business locations In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business
6-2	Businesses that improve the efficiency of the logistics system through systematic development of logistics bases, consolidation of transportation networks, modal shifts, and shared transportation and delivery		
6-3	Businesses introducing equipment (such as digital tachographs) to support eco-driving		
6-4	Businesses to develop facilities for park -and-ride and car-sharing		
6-5	Businesses related to sustainable	● Amount of CO2 emissions reduced (t-CO2)	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	marine transport (including businesses that contribute to the development of Carbon Neutral Ports (introduction of decarbonised cargo handling equipment and introduction of onshore power supply facilities for vessels at berth), prevention of oil fuel spills, and improvement of recovery facilities and waste management in ports and terminals	● Amount of energy saved (MJ) ● Amount of oil spilled annually (tons/year) ● Number of oil spills annually (incidents/year)	

Major Category 7: Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
7-1	Businesses that sustain the water cycle, such as watershed cultivation and rainwater infiltration into the soil (including groundwater preservation and the development of green infrastructure)	● Annual water savings (e.g., total annual water consumption [m^3/year] before and after implementation of the business, and percentage reduction in water consumption before and after implementation of the business) ● Annual wastewater treatment efficiency (e.g., the amount of wastewater treated before and after implementation of the business, the amount of wastewater reuse or reduction contribution [m^3/year], and the reduction contribution ratio [%]) ● Amount of rainwater recycled (m^3) ● Area of developed rainwater infiltration facilities (ha)	● Adverse impacts on ecosystems due to large-scale land reclamation ● The introduction of inappropriate plantings of non-native species ● Adverse impacts on ecosystems due to discharge of concentrated water ● Adverse impacts on global warming due to the use of inefficient equipment and methods In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business
7-2	Businesses that develop facilities for flood prevention	● Decrease in inundation area (e.g., the estimated inundation area [ha] during heavy rains that is expected to decrease as a result of the business)	
7-3	Businesses related to clean water and drinking water infrastructure (including water supply development and desalination businesses)	● Number of beneficiaries (e.g., number of people/households who will gain access to water as a result of the business)	
7-4	Businesses related to urban drainage systems (including the development of	● Amount of water pollutants (toxic substances [e.g., cadmium], chemical oxygen demand [COD], biochemical oxygen demand	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	sewage systems, sewage sludge management, and urban drainage systems that prevent the discharge of pollutants)	[BOD]) reduced by the business activities and discharged to public waters (t)	
7-5	Water-efficient technologies, equipment and water management activities that reduce water supply throughout the supply chain	● Water savings rate (%) ● Water footprint reduction (m^3)	

Major Category 8: Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems)

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
8-1	Agriculture, forestry and fisheries: Businesses related to the development and introduction of crop varieties that are resistant to climate change and the introduction of low environmental impact agriculture	● Area (ha) planted with high-temperature resistant varieties (staple rice)	● Adverse environmental impacts on other environmental factors, such as adverse impacts on the natural environment and ecosystems caused by the business (including the construction and operation phases of facilities and equipment) In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business
8-2	Water environment and water resources: Businesses related to the efficient use of water resources and the introduction of measures against drought	● Drought frequency (assumption), which decreases depending on the business	
8-3	Natural ecosystems: Businesses related to the development of green infrastructure, such as Ecosystem-based Adaptation (EbA) and Ecosystem-based Disaster Risk Reduction (ECO-DRR)	● Comparison of estimated damage costs with and without the functions of Eco-DRR ● Slope collapse prevention function: amount of sediment that can be trapped	
8-4	Natural disasters and coastal zones: In logistics, railways, ports, airports,	● Exposure to climate change-related disasters reduced by the business (estimated) (e.g., estimated inundation area [ha] during	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	roads, rivers, water supply infrastructure, waste management facilities, road safety facilities and private real estate, businesses that strengthen disaster prevention and mitigation functions while considering the natural environment and biodiversity conservation (including projects that contribute to national resilience in response to climate change adaptation)	heavy rains reduced by the business) ● Percentage of properly maintained coastal forests (%) ● Total length of river improvement businesses that consider the effects of climate change (km)	
8-5	Health: Businesses related to the provision of weather information and the Wet-Bulb Globe Temperature (WGBT) index, as well as alerts, dissemination of information on prevention and coping methods, providing information on the occurrence of heat, the introduction of air conditioning and dehumidifiers, and the creation of cooling spots (e.g., sunshades, misting)	● Reduction in the number of heat illness deaths per year (persons/year),etc.	
8-6	Industrial and economic activities:	● Reduction in number of customers and employees affected by	

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	Businesses that ensure the sustainability of their businesses, such as measures to deal with weather-related disasters at business sites, relocation from areas of high climate risk, heat stroke prevention measures, and initiatives to ensure a stable supply of raw materials	weather-related disasters (people) ● Reduction in repair costs due to weather-related disasters (monetary amount) ● Capacity of installed renewable energy and battery storage (MWh)	
8-7	National and urban life: Businesses related to the development of sewerage facilities to prevent inundation caused by rainwater and the development of a system that allows for the prompt and appropriate implementation of emergency measures and restoration in the event of a reduction in water supply due to damage to facilities	● Rate of improvement of combined sewage system (%) ● Number of organizations that have prepared maps showing areas expected to be flooded in the event of the largest class of internal flooding	
8-8	Businesses related to meteorological observation and monitoring, early warning systems, and ICT solutions that contribute to climate change adaptation	● Number of beneficiaries of early warning systems (e.g., number of people using the app), improved accuracy (e.g., improved probability of accuracy and reduced forecast time) ● For elements contributing to adaptation to climate change, see relevant indicators	

Major Category 9: Circular economy adapted products, production technologies and processes (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services); and/or certified eco-efficient products

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
9-1	Businesses that produce environmentally friendly products, including the development and introduction of environmentally friendly products, products that have received eco-labels or certification, packaging made from materials such as recycled materials and renewable resources that have a positive effect on reducing environmental impact, tools and services related to the circular economy (such as sharing, subscription, and repair and maintenance that promote the appropriate long-term use of products and lead to a reduction in environmental impact), and the construction and renovation of industries and workplaces used to	● Amount of CO2 emission reduction per ton of product (t-CO2/t) ※CO2 emissions per ton of product are calculated by comparing before and after implementation of the business ● Amount (t) and percentage (%) of materials with reduced environmental impact, such as recycled materials and renewable resources, used ● Amount of raw material use reduction (t) ※Calculated by comparing the amount of raw materials used in the implementation of the business (t) ● For products that are reused, the average number of times they are used before reaching the end of their useful life ● Percentage of raw materials sourced from sustainable supply chains (%) ● Percentage of products biodegraded or recycled at end of life (%) ● Percentage of plastic containers and packaging that can be reused, recycled, or composted (%) ● Amount of CO2 emissions (t-CO2) and waste (t) avoided through use of tools and services	● Adverse impacts on ecosystems due to large-scale land reclamation ● Increased life cycle greenhouse gas emissions ● Leakage of hazardous substances used in the manufacturing phase of products ● Adverse environmental impacts due to inappropriate mining and the use and disposal of metals such as rare metals In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals depending on the nature of the business

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
	manufacture such products		
9-2	Businesses related to the research and development and demonstration of technologies and products that contribute to the reduction of greenhouse gases (technologies and products related to the projects listed in the related items, technologies related to hydrogen, ammonia, the separation, recovery, storage and use of CO2, next-generation aircraft, zero-emission ships [such as ammonia-fueled ships and hydrogen-fueled ships)] and SAF [sustainable aviation fuel]). These are examples only and are not limited.)	See indicators for related items such as Major Categories 1, 2, and 6	● Adverse impacts on other environmental factors, such as the impact of business operations on the natural environment and ecosystems ● In the case of businesses related to fuels such as hydrogen and ammonia, an increase in life cycle greenhouse gas emissions ● In the case of businesses related to zero-emission ships, the negative environmental impact of nitrous oxide emissions from the combustion of ammonia fuel See the relevant items in Major Categories 1, 2, and 6. Be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business

Major Category 10: Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
10-1	Businesses that construct or renovate new buildings that either meet national standards or have obtained environmental certification demonstrating high performance under nationally and internationally recognised environmental certification systems, such as CASBEE and LEED, regarding green buildings that have energy-saving performance and take a wide range of considerations into account, such as the reduction of life-cycle greenhouse gas emissions, the use of materials with low environmental impact, water use, waste management, and the conservation and creation of biological environments.	[Energy efficiency] ● Annual energy consumption per unit floor area or total floor area (MJ/m^2・year) ● Percentage reduction in energy consumption or contribution to reduction (%) ● Percentage of renewable energy produced at the facility in comparison to total energy consumption (%) [Carbon performance] ● Annual CO2 emissions per unit of floor area or total floor area ($kgCO2/m^2$・year) ● Annual reduction in greenhouse gas emissions and contribution to reduction (t-CO2 equivalent/year) ● Annual reduction and contribution rate of carbon emissions (%) ● Greenhouse gas emissions and reductions (t-CO2 equivalent) or percentage (%) over life cycle of building ● Carbon storage (t-CO2) [Materials] ● Use of materials that disclose information on environmental impacts (type, number of products) ● Amount (t, m^3) and percentage (%) of recycled materials and	See related items under Major Categories 1-9 In addition, be aware of cases where there may be negative environmental impacts or clear inconsistencies with long-term goals, depending on the nature of the business

	Minor Category	Examples of Specific Indicators Used to Calculate Environmental Benefits	Examples of Negative Environmental Impacts
		renewable resources used [Water resource use efficiency] ● Annual water use per unit of floor area or total floor area (m^3/m^2・year) ● Total annual water consumption before and after implementation of the business (m^3/year) or amount of water consumption reduced before and after implementation of the business (%) ● Annual amount of rainwater collected and reused (m^3/year) [Waste Management] ● Annual reduction, reuse, and recycling of waste (as a percentage of total waste [%], or reduction amount, reuse amount, recycling amount [t/year]) [Number of certifications earned and status of certification] ● Types and ratings of CASBEE and LEED certifications earned	

※Among the new constructions or renovations of high-energy-saving buildings listed in 2-1, those that obtain environmental certification may, in practice, be included as part of 10-1.

(Reference) Environmental Certifications

(*Note that these certification systems do not guarantee that certified projects are genuinely green.)

■Green Building Certifications

- **LEED certification system (Certification body: U.S. Green Building Council)**

LEED stands for **Leadership i**n Energy and Environmental Design A certification programme for Green Buildings that started in the U.S. It assesses the energy efficiency and other comprehensive environmental load of buildings through various systems covering everything from planning and design to construction, operation and maintenance of the buildings. For buildings that satisfy the required conditions, there are four certification levels—standard, silver, gold, and platinum—that are granted according to the points earned.

- **CASBEE certification system (Certification body: Institute for Building Environment and Energy Conservation)**

CASBEE stands for the Comprehensive Assessment System for Built Environment Efficiency. Buildings are evaluated and rated according to their environmental performance. This system evaluates building quality comprehensively, evaluating not only the use of energy efficient and environmentally friendly materials, but also interior comfort and harmony with the surroundings. The evaluation results are rated on a scale of one to five levels ranging from S rank (excellent) to C rank (inferior).

-**BELS certification system (Certification body: Association for Housing Performance Evaluation and Labeling)**

BELS stands for Building-Housing Energy-efficiency Labeling System. This certification system is based on the Guidelines for Building Energy Efficiency Labeling (guidelines for labeling the energy consumption of buildings) developed by the Ministry of Land, Infrastructure, Transport, and Tourism. Based on their primary energy consumption, a third-party organization objectively evaluates the energy efficiency of buildings and ranks their results on a five-star scale.

-DBJ Green Building certification system (Certification body: Development Bank of Japan and Japan Real Estate Institute) A certification system which makes, not only an evaluation on the environmental performance of the property, but a comprehensive evaluation including the wellbeing of tenants, risk management regarding disaster reduction and crime prevention, consideration for community and surrounding environment, and cooperation with stakeholders. The evaluation results are rated between five stars (building with excellent considerations, and nationally top of the class) and one star (building with sufficient considerations). If the evaluation regarding the environmental performance items can be confirmed in the total evaluation, it is considered to be effective as an environmental certification.

- BREEAM certification system (Certification Body: Building Research Establishment)

BREEAM stands for Building Research Establishment Environmental Assessment Method. This certification system was developed by the Building Research Establishment (BRE) and an energy and

environment consultancy ECD Energy and Environment in 1990. Assessment is conducted on a maximum of ten category issues: management, health and wellbeing, energy, transport, water, materials, land use, waste, pollution, innovation. Assessment results are given on a five-point scale ranging from Outstanding to Pass. It is the world's first environmental performance assessment indicator and is used widely in and out of the United Kingdom.

■Certifications for Sustainable Forestry and Fishery

- **FSC certification system (Certification body: Forest Stewardship Council)**

This is an international certification system of lumber and lumber products sourced from forests managed responsibly in a manner that is appropriate from a viewpoint of environmental conservation, consistent with social interests and economically sustainable. This system consists of two types of certifications supported by various stakeholders worldwide, namely, Forest Management (FM) certification, which is based upon principles and standards of responsible forest management, and Chain of Custody (CoC) certification, which covers the processing and distribution processes.

- PEFC certification system (Certification body: Sustainable Green Ecosystem Council)

Like the FSC Certification System, the PEFC Certification System consists of two types of certifications, FM Certification and CoC certification. The PEFC Certification System is a forest certification system for its participant countries, which are mainly European and American countries, to mutually recognise forest certification systems that each participant establishes on a national or regional basis. In addition to the foregoing, Japan has its own forest certification system called SGEC (Sustainable Green Ecosystem Council).

- **MSC certification system (Certification body: Marine Stewardship Council)**

This certification system comprises two types of certifications: fishery certification, which concerns fishing operators who conduct appropriately-managed fishery business with appropriate attention paid to the aquatic resource and ecosystem from the viewpoint of sustainability, and COC (Chain-of-Custody) certification, which concerns distribution and processing operators and aims to prevent the marine products captured by operators with the fishery certification from being mixed with other marine products during the distribution and processing process.

- ASC certification system (Certification body: Aquaculture Stewardship Council)

This system certifies that aqua farmers manage environmentally-friendly aqua farms with consideration for local communities. An ASC label is attached to marine products produced by certified aqua farms. As of June 2022, there are twelve types of certifications for aquaculture products produced (salmon, seriola/cobia, freshwater trout, seabass/seabream/meagre, flatfish, tropical marine finfish, tilapia, pangasius, bivalves, abalone, shrimp, seaweed).

- MEI certification system (Certification body: Marine Eco-Label Japan Council)

Abbreviated name for "Marine Eco-Label. It is a system operated by the Marine Eco-Label Japan Council in Japan to certify fishery and aquaculture producers who are actively engaged in the

sustainable use of marine resources and management that takes environmental and ecosystem conservation into consideration, as well as businesses that process and distribute marine products from such producers.

■Certification consideration for biodiversity in community development/environment creation

- ABINC certification system (Certification body: ABINC(Association for Business Innovation in harmony with Nature and Community))

ABINC certification mainly evaluates and certifies the area, quality and form of the green space within corporate premises that will contribute to the biodiversity, sustainable maintenance and management of the green space and communication with stakeholders through utilization of the green space. Certification is given in relation to urban development, shopping centers, manufacturing plants, apartment houses, housing estates with detached houses, logistics facilities and city blocks.

- SEGES Certification System (Social and Environmental Green Evaluation System)
(Certification body: SEGES Evaluation and Certification Committee)

SEGES stands for Social and Environmental Green Evaluation System. This is a certification system for greenery projects owned and created by companies that contribute to society and the environment, such as the mitigation of global warming and heat island phenomena, conservation of local ecosystems, conservation and creation of good landscapes, community building with local communities, and the development of safe and secure urban areas. If the evaluation regarding the environmental performance items can be confirmed in the total evaluation, it is considered to be effective as an environmental certification.

- SITES Certification System (Certification body: Green Business Certification Inc.(GBCI)

Abbreviation for the Sustainable SITES Initiative. SITES is a certification system that comprehensively evaluates the sustainability of the landscape certified by the U.S. Green Business Certification Inc.(GBCI.). The ratings are on a four-point scale, from SITES Platinum to SITES Certified. From the initial stage of the plan to design, construction, operation, and management stages, the entire project is evaluated, and biodiversity conservation, water resource conservation, energy conservation, resource circulation, heat island phenomenon mitigation, health promotion, education, etc. are considered as evaluation viewpoints. If the evaluation regarding the environmental performance items can be confirmed in the total evaluation, it is considered to be effective as an environmental certification.

-JHEP certification system (Certified body: Ecosystem Conservation Society-Japan (ECSJ))

Abbreviated name for Japan Habitat Evaluation and Certification Program. It is the only certification system in Japan that enables objective and quantitative evaluation, certification, and visualization of the level of contribution to biodiversity conservation. JHEP certification system can be applied to initiatives in a wide range of fields, from real estate development to maintenance and management of business facilities, forest maintenance, and biotope creation, at any stage from design to completion of construction, regardless of whether it is a new or existing property, and the evaluation results can be easily compared.

Annex 2 Examples of calculation methods of environmental benefits

The following is not an exhaustive list and only shows some of the examples. Since each example is simplified to facilitate easy understanding, it should be noted that it may not be appropriate to apply these methods without modification in individual projects depending on individual businesses.

1. Cases where the reduction in CO2 emissions serves as an indicator of environmental benefits from solar power generation projects	
Precondition	• The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power generation: 2,000 MWh/year ・Annual power consumption by auxiliary equipment: 10 MWh/year
Calculation method referenced	Operation rules of the certification system of CO2 emissions reduction through the use of Green Energy (Posted on the official websites of Agency for Natural Resources and Energy and Ministry of the Environment, Japan)
Calculation formula	(2,000 MWh/year - 10 MWh/year) x 0.433 t - CO2/MWh = 862 t-CO2/year Reduction in CO2 emissions = (annual power generation - annual power consumption by auxiliary equipment) x electricity-related CO2 emissions coefficient
2. Cases where the reduction in CO2 emissions serves as the indicator of environmental benefits from wind power generation projects	
Precondition	• The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power generation: 3,000 MWh/year ・Annual power consumption by auxiliary equipment: 10 MWh/year
Calculation method referenced	Operation rules of the certification system of CO2 emissions reduction through the use of Green Energy (Posted on the official websites of Agency for Natural Resources and Energy and Ministry of the Environment, Japan)
Calculation formula	(3,000 MWh/year - 10 MWh/year) x 0.433 t -CO2/MWh = 1,295 t-CO2/year Reduction in CO2 emissions = (annual power generation - annual power consumption by auxiliary equipment) x electricity-related CO2 emissions coefficient
3. Cases where the reduction in CO2 emissions serves as the indicator of environmental benefits from woody biomass power generation projects	

Precondition	• The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power generation: 20,000 MWh/year ・Annual power consumption by auxiliary equipment: 300 MWh/year
Calculation method referenced	Operation rules of the certification system of CO2 emissions reduction through the use of Green Energy (Posted on the official websites of Agency for Natural Resources and Energy and Ministry of the Environment, Japan)
Calculation formula	(20,000 MWh/year - 300 MWh/year) x 0.433 t-CO2/MWh = 8,530 t-CO2/year Reduction in CO2 emissions = (annual power generation - annual power consumption by auxiliary equipment) x electricity-related CO2 emissions coefficient
4. Cases where the reduction in CO2 emissions serves as the indicator of environmental benefits from small and medium hydroelectric power generation projects	
Precondition	• The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power generation: 10,000 MWh/year • Annual power consumption by auxiliary equipment: 100 MWh/year
Calculation method referenced	Operation rules of the certification system of CO2 emissions reduction through the use of Green Energy (Posted on the official websites of Agency for Natural Resources and Energy and Ministry of the Environment, Japan)
Calculation formula	(10,000 MWh/year - 100 MWh/year) x 0.433 t-CO2/MWh = 4,287 t-CO2/year Reduction in CO2 emissions = (annual power generation - annual power consumption by auxiliary equipment) x electricity-related CO2 emissions coefficient
5. Cases where the reduction in CO2 emissions serves as the indicator of environmental benefits from geothermal power generation projects	
Precondition	• The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power generation: 80,000 MWh/year • Annual power consumption by auxiliary equipment: 900 MWh/year
Calculation method referenced	Operation rules of the certification system of CO2 emissions reduction through the use of Green Energy (Posted on the official websites of Agency for Natural Resources and Energy and Ministry of the Environment, Japan)
Calculation formula	(80,000 MWh/year - 900 MWh/year) x 0.433 t-CO2/MWh = 34,250 t-CO2/year Reduction in CO2 emissions = (annual power generation - annual power consumption by auxiliary equipment) x electricity-related CO2 emissions coefficient
6. Cases where the reduction in CO2 emissions of the entire building serves as the indicator of environmental benefits from projects to introduce energy efficient equipment and cogeneration systems into buildings	

Precondition	<Before introduction> • Steam is produced by a city gas boiler while all electricity is purchased • Annual power consumption: 3,000 MWh/year • Annual city gas consumption: 356,000 Nm^3/year <After introduction> • Some of the equipment are changed to energy efficient equipment • City gas boilers are removed and a heat pump is installed when electrification was possible, and cogeneration equipment is installed when electrification was not possible. • The installation of energy-saving equipment reduces annual electricity consumption by 10%. • Annual power consumption: 200 MWh/year • Annual city gas consumption: 800,000Nm^3/year ・Annual steam production: 14,400GJ/year • Unit calorific value of city gas: 44.8 GJ/1000 Nm^3 ・City gas-related carbon emission coefficient: 0.0136 tC/GJ • Annual power generation: 2,500 MWh/year • The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case.
Calculation method referenced	"Manual for the Calculation and Reporting of Greenhouse Gas Emissions (Ver. 4.2), Second Edition: Methods to Calculate Greenhouse Gas Emissions" (Posted on the official website of the Ministry of the Environment, Japan) * In the case of using hydrogen as a fuel, the following serve as a useful reference. "Guidelines for Assessing Effect of Greenhouse Gas Emissions Reduction in Hydrogen Supply Chain Ver. 2.1", "Tool for Calculating Effect of Greenhouse Gas Emissions Reduction in Hydrogen Supply Chain Ver. 1.0" (Posted on the official website of the Ministry of the Environment, Japan)
Calculation formula	(3,000 MWh x 0.433 t-CO2/MWh + 356,000 Nm^3 x 44.8 GJ/1000 Nm^3 x 0.0136 tC/GJ x 44/12) - (200MWh x 0.433 t-CO2/MWh + 800,000 Nm^3 x 44.8 GJ/1000 Nm^3 x 0.0136 tC/GJ x 44/12) ＝1220.5 t-CO2/year Reduction in CO2 emissions = (annual power consumption before renovation x power emission coefficient + annual city gas consumption before renovation x unit city gas calorific value x city gas carbon emission coefficient x 44/12) - (annual power consumption after renovation x power emission coefficient + annual fuel consumption after renovation x unit calorific value of fuel x fuel carbon emission coefficient x 44/12) * 44/12 is a coefficient to convert the amount of carbon emissions to the amount of CO2 emissions. * The above calculation example is for a case of cogeneration using city gas as fuel. The fuel-related carbon emission coefficient can be set as zero when hydrogen produced from renewable energy electricity or biogas is used. * In addition, from the viewpoint of ensuring consistency between the implementation of the target projects and the achievement of long-term objectives, it is encouraged to gradually reduce the city gas-related carbon emission coefficient to zero by introducing syngas.
7. Cases where the reduction in the BOD load serves as the indicator of environmental benefits from projects to renew facilities to treat effluent discharged from plants into public water bodies	
Precondition	• Average volume of wastewater discharged per day: 1,000 m^3/day • Annual average BOD of effluent discharged from effluent treatment facilities: 20 mg/L (before project implementation) ® 10 mg/L (after project implementation) • Number of days plants operated per year: 365 days

Calculation method referenced	Environmental Reporting Guidelines (2018 edition) (Posted on the official website of the Ministry of the Environment, Japan)
Calculation formula	(20 mg/L - 10 mg/L) x 1/1,000,000 (unit conversion mg ® kg) x 1,000 (m^3/day) x1,000 (unit conversion m^3 ® L) x 365 (days/year) = 3,650 kg/year Reduction in BOD load = (annual average BOD of effluent before renewal of effluent treatment facilities - annual average BOD of effluent after renewal of effluent treatment facilities) x average amount of effluent per day x number of days plants operated per year
8. Cases where the amount of carbon absorbed by trees serves as the indicator of environmental benefits from planting projects	
Precondition	• Target area: 200 ha ・Final cutting area per year: 2 ha • Annual amount of growth: 2.9 m^3/ha/year • Target: Cedar (Magnification coefficient: 1.23, ratio of the above-ground part to the under-ground part: 0.25, bulk density: 0.3140 t/m^3, carbon content: 0.51) • The land use category before tree planting was agricultural land (general farmland) and the baseline amount of carbon absorbed was 0 t-CO2/year. ("National Greenhouse Gas Inventory Report of JAPAN, April 2021 edition" posted on the official website of National Institute for Environmental Studies)
Calculation method referenced	"How to view the carbon absorbed by forests: Development of calculation and reporting systems for carbon absorption by forests as required by the Kyoto Protocol" (Posted on the official websites of the Ministry of Agriculture, Forestry and Fisheries and the Forestry and Forest Products Research Institute)
Calculation formula	[(2.9 m^3/ha/year x (200ha-2 ha)) x 1.23 x (1 + 0.25) x 0.3140 t/m^3 x 0.51] - 0 = 141 t-C/year [Annual carbon absorbed at a planting site = an increase in trunk volume x magnification coefficient x (1 + ratio of the above-ground part to the under-ground part) x bulk density x carbon content] - annual baseline amount of carbon absorbed When converting the amount of carbon to the weight of carbon dioxide, multiply the above formula by 44/12.
9. Cases where the reduction in CO2 emissions serves as the indicator of environmental benefits from cargo transport projects concerning a modal shift from road to rail transport	
Precondition	• Annual total volume of cargo transport: 8,000,000 tkm/year • CO2 emission intensity for cargo vehicles: 0.225 kg-CO2/tkm • CO2 emission intensity for freight railways: 0.018 kg-CO2/tkm (Posted on the official website of the Ministry of Land, Infrastructure, Transport and Tourism)
Calculation method referenced	"Joint guidelines on methods for calculating carbon dioxide emissions in the logistics sector" (Posted on the official websites of the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism)
Calculation formula	8,000,000 tkm/year × (0.225 kg-CO2/tkm－0.018 kg-CO2/tkm) × 1/1,000 (unit conversion kg®t) ＝1,656 t-CO2/year CO2 emission reduction = Annual total volume of cargo transport x (CO2 emission intensity for cargo vehicles - CO2 emission intensity for freight railways)
10. Cases where the reduction in CO2 emissions by electric cars compared to gasoline cars serves as the indicator of environmental benefits from projects to offer loans to new purchasers of electric cars	

Precondition	• Number of cars targeted for loans: 1,000 • Average fuel economy of gasoline cars: 21.2 km/L (Posted on the official website of the Ministry of Land, Infrastructure, Transport and Tourism) • Annual average mileage of gasoline cars (private cars): 10,000 km/year (Posted on the official website of the Ministry of Land, Infrastructure, Transport and Tourism) • Unit calorific value of gasoline: 34.6 MJ/L ・Gasoline-related carbon emission coefficient: 0.0183 kg-C/MJ (“Manual for the Calculation and Reporting of Greenhouse Gas Emissions (Ver. 4.8), Second Edition: Methods to calculate greenhouse gas emissions” (Posted on the official website of the Ministry of the Environment, Japan)) • Electric electricity economy of electric cars to be introduced: 6 km/kWh • The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case.
Calculation method referenced	“Joint guidelines on methods for calculating carbon dioxide emissions in the logistics sector” (Posted on the official websites of the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism)
Calculation formula	{(1,000 vehicles × 10,000 km/year)/21.2 km/L} × 34.6 MJ/L × 0.0183 kg-C/MJ × 44/12 × (1/1,000 (unit conversion kg ® t)) - {(1,000 unit×10,000 km/year)/6 km/kWh} × 0.433 t-CO2/MWh × (1/1,000 (unit conversion MWh ® kWh))＝373 t-CO2/year Reduction in CO2 emissions = (((number of cars targeted for loans x annual average mileage (km/year)) ÷ fuel economy of gasoline cars) x unit calorific value of gasoline x gasoline carbon emission coefficient x 44/12) - ((number of cars targeted for loans x annual average mileage (km/year)) ÷ electricity economy of electric cars x electricity-related CO2 emissions coefficient) * 44/12 is a coefficient to convert the amount of carbon emissions to the amount of CO2 emissions.
11. Cases where a decrease in the estimated wetted surface area and estimated number of affected houses are used as indicators of environmental benefits from projects to construct discharge channels to control submergence in the event of river flooding, which are conducted as part of a climate change adaptation project	
Precondition	• Estimated wetted surface area: about 100 ha (before construction) ® about 25 ha(after construction) • Estimated number of affected houses: about 500 houses (before construction) ®about 95 houses (after construction)
Calculation method referenced	None. * Refer to the following for the mapping method of assumed flood prone areas. “Preparation Manual of the Notional Flooded Areas (Ver. 4)” (Posted on the official website of the Ministry of Land, Infrastructure, Transport and Tourism) “Preparation Manual of the Expected Flooding of Small and Medium Rivers (Ver. 2)” (Posted on the official website of the Ministry of Land, Infrastructure, Transport and Tourism)
Calculation formula	Decrease in flooded area = estimated wetted surface area before construction - estimated wetted surface area after construction = about 100 ha - about 25 ha = about 75 ha Estimated decrease in the number of affected houses = estimated number of affected houses before construction - estimated number of affected houses after construction = about 500 houses - about 95 houses = about 405 houses
12. Cases where the reduction in CO2 emissions per ton of products serves as the indicator of environmental benefits from projects to enhance energy efficiency of the manufacturing process at plants	

Precondition	• Annual product manufacturing volume: 15,000 t/year • The CO2 emission coefficient for electricity is based on the latest emission coefficient of the retail electric utility with which the company has a contract. (Emission Coefficient by Electricity Utility - FY 2020 Results - (available on Ministry of the Environment, Japan's website)) * The CO2 emission coefficient is assumed to be 0.433t-CO2/MWh in this case. • Annual power consumption: 5,000 MWh/year (before revamp) ® 4,000 MWh/year (after revamp) • Annual A-type heavy oil consumption: 800 kL/year (before revamp) ® 600kL/year (after revamp) • Unit calorific value of A-type heavy oil: 39.1 GJ/kL A-type heavy oil-related carbon emission coefficient: 0.0189 tC/GJ
Calculation method referenced	"Manual for the Calculation and Reporting of Greenhouse Gas Emissions (Ver. 4.8), Second Edition: Methods to calculate greenhouse gas emissions" (Posted on the official website of the Ministry of the Environment, Japan)
Calculation formula	(5,000MWh × 0.433t-CO2/MWh + 800kL × 39.1GJ/kL × 0.0189tC/GJ × 44/12) / 15,000t -(4,000MWh × 0.433t-CO2/MWh + 600kL × 39.1GJ/kL × 0.0189tC/GJ × 44/12) / 15,000t ＝ 0.06t-CO2/t Decrease in emission intensity (CO2 emissions per ton of product manufactured) = (annual power consumption before revamp x power emission coefficient + annual A-type heavy oil consumption before revamp x unit calorific value of A-type heavy oil x A-type heavy oil-related carbon emission coefficient x 44/12) ÷ annual product manufacturing volume–(annual power consumption after revamp x power emission coefficient + annual A-type heavy oil consumption after revamp x unit calorific value of A-type heavy oil x A-type heavy oil-related carbon emission coefficient x44/12) ÷ annual product manufacturing volume * 44/12 is a coefficient to convert the amount of carbon emissions to the amount of CO2 emissions.
13. Cases where a reduction in the amount of plastics used serves as the indicator of environmental benefits from projects to introduce equipment to produce packaging materials with less plastics at packaging manufacturing plants	
Precondition	• ・Amount of plastics used per packaging material (intensity index using the usage before introduction as 100%) : 100% (before introduction) ® 60% (after introduction) • ・The current amount of plastics used to produce 100,000 pieces of packaging materials (before introduction): 5 tons
Calculation method referenced	None.
Calculation formula	A reduction in the amount of plastics used to produce 100,000 pieces of packaging materials = 5 tons x (100% - 60%) = 2 tons
14. Cases where the absorption amount of greenhouse gases as a result of greening serves as the indicator for environmental benefits from projects for absorption by urban greening	
Precondition	• To account for the absorption amount of greenhouse gases by the greening of the project site (planting of tall trees)
Calculation method referenced	'Low Carbon City Planning Practical Handbook (Resources)' (Ministry of Land, Infrastructure, Transport and Tourism, City Bureau, City Planning Division) p. 18-19

Calculation formula	(Regions other than Hokkaido Prefecture) CO2 absorption (t-CO2/year) =0.0385 (t-CO2/per tree per year) x number of tall trees (trees) (Hokkaido Prefecture) CO2 absorption (t-CO2/year) =0.0359 (t-CO2/per tree per year) x number of tall trees (trees) If the number of tall trees are unknown within the project site, calculation based on area is also possible as an alternative. Refer to page 18 and page 19 of the 'Low Carbon City Planning Practical Handbook (Resources)' for details.

* For the best available technology (BAT: Best Available Technology) for reducing greenhouse gas emissions, the measures stipulated in the Guidelines for Emission Reduction, etc. based on Article 25 of the Act on Promotion of Global Warming Countermeasures (Act No. 117 of 1998) can be used as referen

Annex 3 Examples of Reporting[42]

The following is not an exhaustive list and only shows some of the examples.

1) Examples of information disclosure by Green Projects

Project category	Possible Projects	Outline	Progress	Signed amount (amount financed by issuer[43])	Share of total project financing	Share of the sector component in total proceeds[44]	Amount of proceeds allocated till now[45]	Average Portfolio lifetime	Environmental benefits
Projects for renewable energy	Wind power generation	Project to construct wind power facilities, generate power at the facilities, and sell electricity through feed-in tariffs (FIT)	Under construction (To start operations in MM/YYYY)	XXX million yen	XX%	XX%	XXX million yen	XX years	Amount of CO_2 reduced ZZ t-CO_2/year
Projects for pollution prevention and control	Recycling of waste	Project to construct fuel manufacturing facilities and manufacture fuel via waste recycling	Construction to start in MM/YYYY						Reduction in the waste incinerated: XX t/year
Projects for the sustainable management of living natural resources	Planting	Project to plant trees to conserve and recover ecosystems in the XX region	Completed						Area of forests regenerated by planting: X ha
			Total	XXX million yen	XX%	XX%	XXX million yen	-	

[42] 'Handbook – Harmonized Framework for Impact Reporting June 2021' and 'Guidance Handbook January 2022' by ICMA provides reference information on disclosure items and methods therefor and other matters.
[43] The amount intended to be invested in the project at the time of issuance
[44] Reporting is required when a project includes more than one category (e.g., A project including elements of renewable energy and energy efficiency)
[45] Amount actually invested in the project by the time of reporting.

* The currently unallocated proceeds (XXX million yen) will be allocated in MM and M'M'/YYYY along with the progress of the construction of the waste recycling facilities. Until then, the unallocated proceeds will be managed as cash or cash equivalents.
* Details of each project are given below. (omitted)

2) Example of information disclosure (aggregated information) by category

Project category	Possible Projects	Number of projects	Signed amount (amount financed by issuer)	Share of Total Portfolio Financing	Share of the sector component in total proceeds	Allocated amount	Average portfolio life	Environmental benefits (CO_2 reduction)
Projects for renewable energy	Solar power generation	XX	XXX million yen	XX%	XX%	XXX million yen	XX years	ZZ t-CO_2/year
	Wind power generation	XX	XXX million yen	XX%	XX%	XXX million yen	XX years	ZZ t-CO_2/year
	Manufacture of batteries	XX	XXX million yen	XX%	XX%	XXX million yen	XX years	ZZ t-CO_2/year
	Subtotal	XX (Refinancing: xx)	XXX million yen	XX%	XX%	XXX million yen (Refinancing: XXX million yen)	XX years	ZZ t-CO_2/year
Projects for energy efficiency	Construction of new energy efficient buildings							
	Renovation of buildings for better energy efficiency							
	Subtotal							
Projects for eco-efficient products, manufacturing technologies, and processes	Manufacturing of products that meet the requirements of environmental certifications							
	Subtotal							
Total		XX (Refinancing: xx)	YYY million yen	XX%	XX%	YYY million yen (Refinancing: YYY million yen)	-	ZZ t-CO_2/year
YYY million yen								

*The following are a few examples of typical projects. (omitted)

Annex 4 Examples of KPIs

Below are examples of KPIs in general categories and in each category for setting up KPIs to measure the achievement of the SPTs. The following is not an exhaustive list and only shows some of the examples. KPI should be set according to the nature of business of issuers or borrowers, and KPI may not be limited to environment-related KPIs, but may also be set from the perspective of social aspects, etc.

< Examples of KPIs >

Category	Case
Energy Efficiency	➢ Annual amount of energy saving (electric power MWh/GWh, other energies GJ/TJ) ➢ Annual reduction of greenhouse gas emissions/contribution to reduction (amount in CO2 equivalent) ➢ Energy performance per business unit (MWh/m^2, MWh/unit, MWh/t, etc.) and so on
Greenhouse gas emission	• Reductions in greenhouse gas emissions in relation to products manufactured or sold by those seeking financing or to the production or manufacturing cycle • Reduction not only of the amount of greenhouse gases emitted by the company itself but also reduction of the total amount of greenhouse gases emitted in the entire supply chain from the upstream through downstream of its business activities (total of Scope 1 (amount emitted directly from the plants, offices, vehicles, etc. of the company), Scope 2 (amount emitted indirectly from the electricity and other energy consumed by the company) and Scope 3 (amount of other indirect emission)) (MJ, MWh, pkm, tkm, carbon intensity per employee or per investment, or absolute quantity) • Proportion of capital investments in low carbon and carbon removal technologies in line with the net-zero scenario (%) and so on
Renewable energy	• Increases in the amount of renewable energy generated or used by those seeking financing (GW, %) • Proportion of renewable energy production in total energy production (%) • GHG emissions avoided in relation to renewable energy production and so on
Water consumption	• Water savings made by those seeking financing • Improvement of water recycle rate of those seeking financing and so on
Waste water treatment	• Amount of waste water treated or reused by those seeking financing and so on
Sustainable sourcing	• Increases in the sourcing of certified sustainable raw materials/supplies • Percentage of products using sustainability-conscious packaging and so on
Circular economy	• Increase or decrease in amount of input of natural resources • Recycling rates in waste disposal facilities • Use of recycled materials and renewable resources, etc. with impact to reduce

	environmental loading • Shift to products with effect to enhance reduction of wastes and so on
Sustainable agriculture/food/forestry	• Improvements in production or sourcing of sustainable products and/or quality products using appropriate labels or certifications (km^2, ton, %) • Increase in the products concerning which the traceability regarding sustainability has been established (%) • Percentage of forests managed under the certification system (FSC, PEFC, etc.) (%) and so on
Biodiversity	• Improvement of conservation and protection of biodiversity and ecosystem (increase in land areas of tree planting or reforestation, increase in sustainable forest area certified by FSC, etc., increase in sourcing of marine products certified by MSC, ASC, etc., increase in the sales of products and services that contribute to preservation of biodiversity) (km^2 or %, etc.) • Absolute number of protected・restored indigenous species, flora or fauna and so on
Adaptation to climate change	• Expansion of areas of agricultural land converted from desert or devastated land • Decrease or reduction of (financial, humanitarian, and ecological) damages due to extreme weather events after investments in adaptation or resilience enhancement initiatives (amount or %) • Reduction in the number of days of interruption of supply chain and/or business activities due to meteorological phenomena and so on
Global ESG assessment[46]	• Improvements in the ESG rating of those seeking financing or achievement of a recognised ESG certification and so on

*In addition to the above KPIs, KPIs can also be selected from the social viewpoints (human rights and community engagement, affordable housing, data security, employee health and safety, employee engagement, diversity and inclusion, employee training, etc.) and governance (corporate ethics, strong corporate governance and transparency, etc).[47]

<Model Cases of Relation between Sustainability Targets and SPTs>

Several model cases are presented for the establishment of sustainability goals and related SPTs by issuers and borrowers. Each case is intended to serve as a reference for materiality and the relationship between sustainability targets and SPTs, but the following are not exhaustive. The sustainability targets and related SPTs should be set based on the goals and circumstances of each company through the dialogue between

[46] When using ESG ratings or certifications, it is necessary to clarify whether to use the entire rating or a specific E, S, or G portion of the rating. If no other KPIs are involved, it is expected to explain why ESG ratings or certifications are the best indicators to reflect the ESG issues of those seeking financing.

[47] Sustainability-Linked Loan Principles Annex 1 – KPIs

those seeking financing and stakeholders such as financial institutions. KPI should be set according to the nature of business of issuers or borrowers, and KPI may not be limited to environment-related KPIs, but may also be set from the perspective of social aspects, etc.

Model Case 1

Company A, which is a manufacturing company, regards environmental considerations as an important issue from the viewpoint of both business issues and risks in its business strategy and medium-term business plan. It established a reduction target toward achievement of the 1.5°C target, and obtained Science Based Targets (SBT)[48] certification. Based upon SBT, it designated as SPTs the previously-established reduction target of the emission of greenhouse gases from its operation and manufacturing of its products.

Model Case 2

Company B, engaging in the food manufacturing business, regards human health and sustainable diet as an important issue in its business strategies. Thus, it established as SPTs maintenance of the sales composition ratio of the products with certification given by a private certification system for the companies that conduct business activities with consideration to environment and society above a certain level and the evaluation of ESG factors.

Model Case 3

Company C, which is a retailer, has a vision for sustainability management to achieve both the growth of its business and the development of society. In an effort to realise a low-carbon society, it has been proactively working toward reduction of CO2 emission, and as a part of such effort, it joined RE100[49]. As a participant to RE100 is obliged to meet 100% of its energy requirements with renewable energy, it designated achievement of it as an SPT.

Model Case 4

Company D, which operates hotels, considers social issues such as human rights as well as environmental issues such as climate change as important issues for the company. Thus, it sets SPTs as the reduction targets of Scope 1, 2, and 3 GHG emission, which are rated by the SPO as best practices within the sector. The company obtains the SBTi certification under the 1.5°C target for Scope 1 and 2, and under the 2 °C target for Scope 3.

Model Case 5

Company E, which is a mineral mining company, has set sustainable and responsible mining as its sustainability/ESG strategy. As part of this strategy, it has set targets of the proportion of women in senior management positions as well as GHG emissions reduction.

The absolute and relative values (CO2e/oz) of Scopes 1 and 2 for GHG reduction were set as SPTs, and these targets are in line with the SBTi certification for 1.5 °C target. In terms of the proportion of women in senior management, the company set the increase to a certain level by 2030 as SPTs.

Model Case 6

Company F, which is a manufacturer of active pharmaceutical ingredients, has adopted the

[48] A global initiative calling on companies to set green house gas reduction targets in line with reduction scenarios based on science to limit global warming to less than 2°C

[49] A global initiative where companies commit to sourcing 100% of their energy use in renewables

Sustainability Vision as one of the 3 pillars of its Sustainability Strategy, stating that “Ensuring sustainable consumption and production patterns” in SDG 12 is close to its own values. It has set as SPTs a reduction in freshwater use, a reduction in the amount of waste disposed of/recycled (%), and GHG emission reduction.

Annex 5 Preface to the guidelines at the time of their formulation and revision and list of the Members of the Green Finance Committee in the past

(Reference)

Foreword for the Green Bond and Sustainability-Linked Bond Guidelines 2022 and the Green Loan and Sustainability-Linked Loan Guidelines 2022

More than two years have passed since revision of the Green Bond Guidelines 2020 and the formulation of the Green Loan and Sustainability-Linked Loan Guidelines 2020. Since then, and despite the COVID-19 pandemic, the world has seen a strong push to promote commitments to decarbonization toward achieving the goals of the Paris Agreement. Against the backdrop of these major global trends, the green finance market, including the Green Bond market, has continued to expand both domestically and internationally.

Furthermore, Russian invasion of Ukraine has caused a spike in the international prices of crude oil, raw materials, grains, and other commodities, and concerns over the supply of scarce materials have persisted. The importance of energy security from the perspective of maintaining our livelihoods and economic activities has accordingly been reaffirmed. Meanwhile, from this same perspective, Japan must further accelerate its efforts to transition to a decarbonized society, including comprehensive energy conservation and the promotion of autonomous and decentralized renewable energy.

With over 150 trillion yen of domestic investment reportedly needed over the next ten years to transform Japan's economy, society, and industrial structure toward decarbonization, the mobilization of public and private investment is essential. Furthermore, Green Bonds and other forms of green finance are expected to play an increasingly significant role. At the same time, internationally, issues related to natural capital and the circular economy have been indicated to be closely related to decarbonization. Domestically, we have seen an increasingly strong awareness of the problems arising in local communities from the rapid expansion of solar power generation, such as causing landslides or disturbing cultural landscapes. Accordingly, it has become all the more important to take a holistic view of various environmental and social impacts, including both positive and negative ones.

In light of these circumstances, the revision and formulation of the Guidelines was undertaken in 2022 in accordance with discussions on the Guidelines to date. Deliberations were conducted on how to realize an appropriate expansion of the green finance market in Japan, taking into consideration consistency with international principles such as the Green Bond Principles (GBP).

Specifically, in the main text of the Green Bond Guidelines, the Green Bond Framework and conducting of external reviews have been positioned as key recommendations for issuers in the context of promoting explanations to market participants by those seeking financing (issuers and borrowers). Explanations to market participants regarding the identification, mitigation, and management of negative impacts associated with a project have also been recommended. In the Annex, in order to improve the usefulness of the Guidelines for a wider range of those seeking financing, we have clarified points for determining the so-called “greenness” of Green Projects, and compiled a list of uses for proceeds in Japan, key performance indicators (KPI), and examples of negative impacts, making significant additions to the content. Furthermore, the Guidelines have positioned the relationship with climate transition finance, which is already in practice in Japan, in a manner consistent with the “Basic Guidelines for Climate Transition Finance”. Moreover, the Sustainability-Linked Bond Guidelines have been newly formulated for Sustainability-Linked Bonds, which are expected to expand significantly in Japan going forward.

In addition, the discussions of the Green Finance Committee in 2022 also focused on various issues. These included how discussions and situations taking place both domestically and internationally should be reflected in guidelines for the domestic market in Japan in a flexible manner, as well as how long the domestic guidelines will be needed in the first place, in light of the expansion of the domestic green finance market and the acceleration of the international debate on sustainable finance.

In formulating and revising the Guidelines in 2022, examples of specific responses in financing in Japan, taking into consideration consistency with international principles and adding interpretations in line with domestic conditions, are provided in the main text of the Guidelines. The Guidelines also include an “Annex,” which provides specific examples adapted to domestic characteristics. The content of the examples in the Annex was expanded considerably in 2022. Going forward, while continuing to specify the relationship between these Guidelines and international principles, we will continue to examine mechanisms to expand the domestic

market by appropriately reflecting domestic and international knowledge and past issuance records in a timely manner, especially with regard to the Annex.

In order to fully promote a substantial expansion of public and private investment aimed at the structural transformation of our economy and society toward decarbonization and the realization of a sustainable economy and society, it is important for all market participants, including those seeking financing, investors/financial institutions, intermediaries, and service providers, to seek to visualize and maximize the positive impacts arising from investments. We strongly hope that the Guidelines herein will contribute to the creation of a sustainable economy and society by promoting the full performance of market functions, together with various other guidelines and measures established by the government.

Revision of the Green Bond Guidelines 2022 and the Green Loan and Sustainability-Linked Loan Guidelines 2022 (Formulation of Sustainability-Linked Bond Guidelines 2022)

The “Green Finance Committee” met four times between December 2021 and June 2022. The content of the Guidelines was discussed by experts and practitioners in the field of Green Bonds, etc., based on the revision of international principles by ICMA and other organizations, as well as market and domestic policy trends.

In February 2022, an “Opinion Exchange Meeting of the Green Finance Committee” was held to exchange opinions on the content of the Guidelines among the committee members and market participants with knowledge in various fields. A wide range of opinions were exchanged, including those of operating companies (issuers) and data vendors, in addition to those of banks, securities companies, and consultants/external reviewers.

In addition, public comment on the Guidelines was called for from April 22 to May 20, 2022, to solicit a wide range of opinions on the content of these Guidelines. We also asked relevant international organizations for their opinions on the content of the Guidelines. These opinions were considered by the study group and reflected in the discussions of the study group as necessary.

Based on these discussions, the Ministry of the Environment, Japan (MOE) formulated these Guidelines.

Foreword for the Green Bond Guidelines 2020 and Green Loan and Sustainability Linked Loan Guidelines 2020

Approximately three years has passed since the publication of the “Green Bond Guidelines 2017” in 2017, and the total amount of issuance in Japan’s Green Bond market has greatly expanded since their inception, reaching approximately 820 billion yen in 2019.

In the meantime, however, the environmental problems surrounding us are becoming increasingly serious. In Japan, flooding and landslides have been frequent occurrences in various parts of the country due to heavy rains and other events, causing significant damage. Concerns have arisen over the increasing frequency and extremity of water-related disasters caused by increased rainfall and rising sea levels accompanying climate change. Severe marine pollution from plastic waste has also become apparent. Australia is experiencing large-scale and devastating forest fires due to climate change. The top five global risks likely to occur in the next decade, as identified in the Global Risk Report 2020 prepared by the World Economic Forum, were all environmental issues: extreme weather, failure of climate action on mitigation and adaptation, large-scale natural disasters, large-scale biodiversity loss and ecosystem collapse, and human-made environmental disasters.

The global situation surrounding sustainable finance is undergoing major changes amid the materialization of risks and increased awareness of crises associated with climate change and planetary boundaries. Above and beyond increasing ESG investments and issuance of Green Bonds globally, there has been an accelerating trend toward climate-related financial disclosures since the delivery of the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In addition, the Network for Greening the Financial System (NGFS) has begun to work on climate change risks, and interest in climate change risks is increasing among central banks and supervisory authorities. In the EU, policy implementation is progressing based on the Sustainable Finance Action Plan (SFAP), including the development of the EU Green Bond Standard and EU Taxonomy. Developments surrounding transition finance have also begun. In addition, Positive Impact Finance, which generates positive environmental and social impacts, is being promoted for the creation of a sustainable society and economy.

Amid the progress on these various measures, attention is increasingly on Green Bonds as they can have a clear positive impact on the environment by supporting companies that are making credible green investment proposals. In the Sustainable and Responsible Investment Guide for Central Banks' Portfolio Management (released by NGFS in October 2019), Green Bond investments were cited as the most commonly-known responsible investment strategy by central banks. The Bank for International Settlements (BIS) launched its Green Bond fund initiative and established the Green Bond Fund for central banks in September 2019. ICMA has also revised its Green Bond Principles as appropriate and published a supplementary Guidance Handbook.

The publication of the Green Loan Principles (GLP) in 2018 has also raised interest in Green Loans. Green Loans are loans received for financing projects with environmental benefits, and by aligning the basic framework with Green Bonds, seamless financing for Green Projects is expected to become more active. Furthermore, the Sustainability-Linked Loan Principles (SLLP) were released in 2019, and the number of Sustainability-Linked Loans is on the increase. Considering that the ratio of indirect financing is high in Japan and that financial institutions are the ones working directly with and providing funds to local SMEs, Green Loans and Sustainability-Linked Loans have a major role to play in the creation of a sustainable society that has realized the SDGs.

These Guidelines have been revised and formulated in light of the above developments, including the revision of the Green Bond Principles (GBP) and the publication of the Guidance Handbook. For this revision and formulation, consistency with the Green Bond Principles, Green Loan Principles, and Sustainability-Linked Loan Principles has been taken into consideration, and content has been aligned with international trends. In addition, the concept of Sustainability Bonds has been explained, and examples based on issuances in Japan have been expanded.

As noted above, the crisis associated with climate change and planetary boundaries requires immediate action. For the transition to a decarbonized society and the realization of a sustainable society that embodies the SDGs, it is absolutely necessary for market participants, including issuers and borrowers, investors and financial institutions, intermediaries, and service providers, to mainstream the consideration of ESG factors. We strongly expect Japan to make further progress in ESG finance initiatives in all asset classes, not limited to Green Bonds, Green

Loans and Sustainability-Linked Loans, and for Japan to truly become a major power in ESG finance.

Foreword for the Green Bond Guidelines 2017

Currently, the world faces a variety of environmental issues that could threaten the survival of the human species and the sustainability of economic activities. According to the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) published over the course of 2013 and 2014, there is no room for doubt on the progress of global warming, and extensive, serious risks are expected to affect human society due to temperature rise and the concomitant negative impacts on the availability of food and water and extreme weather events. All human activities are based on a favorable global environment, and economic activities, including finance, are no exception. On the other hand, economic activities involve risks that could damage the favorable global environment, such as CO2 emissions.

In light of this situation, the Paris Agreement, the first legally binding consensus on climate change in the 18 years since the Kyoto Protocol, was adopted at COP21 on December 12, 2015, in Paris, France. As an international agreement, the Paris Agreement brought all nations together for a common cause, for the first time aiming to undertake ambitious efforts to combat climate change by setting targets to hold the increase in global average temperature to well below 2°C above pre-industrial levels, and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. It also aimed to make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

Since a favorable global environment connotes limited resources, these must not be exhausted by the current generation. We have a responsibility to pass on the favorable global environment, on which prosperity on par with current levels can be built, to future generations. The 2°C target of the Paris Agreement embodies our efforts to fulfill this responsibility.

However, achievement of the 2°C target will require substantial capital. According to estimates by the International Energy Agency (IEA), additional investments of US$9 trillion are required from 2016 to 2050 to decarbonize the power sector as part of the effort to achieve the 2°C target. Moreover, in order to achieve energy efficiency targets in the building, manufacturing, and

transportation sectors during the period from 2016 to 2050, additional investments of US$3 trillion are required. Financing all these investment needs with public funds is not realistic, however. A more efficient way of securing capital is to draw on market dynamics, and introducing private funds is essential. Therefore, charting a pathway for domestic and overseas private funds, including Japan's household financial assets of over 1,700 trillion yen, to flow into such investment opportunities is critical.

Finance is the lifeblood of the economy and wields great influence over the direction of the economy and society. As such, the basic responsibility of financial market participants is expected to be contributions to the maintenance of the favorable global environment by creating such financial flows.

Furthermore, the funds in the financial market are originally those directly or indirectly entrusted to market participants by a wide range of citizens. Therefore, the essential role of fiduciaries is not only executing their legal fiduciary duty, but also using funds for the creation of a safe and secure future society for citizens. Moreover, with the finite nature of the global environment becoming ever more a reality, protecting the favorable global environment is equivalent to protecting the foundation of economic activities, and has medium and long-term implications for the survival of finance itself.

Along with global decarbonization efforts, the technologies, products, and services required for decarbonization are expected to create a variety of business opportunities. Therefore, accommodating investment demand in markets expected to grow is important for financial market participants.

Green Bonds are bonds for which proceeds are invested exclusively in projects that offer environmental benefits (Green Projects). The bonds explicitly create a flow of funds toward Green Projects by combining the efforts of issuers and investors and are expected to become one of the pathways by which financial market participants can fulfill their basic responsibilities for the maintenance of the favorable global environment, while at the same time pursuing investment opportunities. In fact, since the release of the Green Bond Principles (GBP) in 2014, Green Bond issuances and investments have increased significantly, mainly overseas. While paying our highest respect to people who have developed and supported the Green Bond market, we voice our expectation that a broad range of financial market participants will continue to

actively promote the issuance of and investment in Green Bonds looking ahead to the future.

In addition, Green Bonds may help to attract people who have not been interested in investments in conventional bonds. For example, if a local government or a local company issues a Green Bond for a Green Project in the local community, it may create a new flow of funds that circulate within the community. Investing local funds in projects to protect a community's favorable natural environment has the potential to contribute to regional revitalization through creating employment in renewable energy projects, the maintenance and development of tourism projects, and the creation of disaster-resilient communities.

These Green Bond Guidelines were created in an aim to enhance the visibility of Green Bonds and expand Green Bond issuance and investment within Japan in line with the global development of the Green Bond market. When developing the Guidelines, we considered consistency with the Green Bond Principles, which are widely accepted around the world. It is expected that a broad range of market participants will issue and invest in Green Bonds under these Guidelines, leading to private funds being appropriately invested in projects that contribute to the conservation of the global environment. We sincerely hope that such efforts will ensure that consideration for the environment is embedded in every decision-making process, not only related to bonds but to all financial activities, so that a sustainable society is achieved through market mechanisms.

Background to the Development of the Guidelines

Formulation of the Green Bond Guidelines 2017

From October 2016 to March 2017, the Green Bond Review Committee (hereinafter referred to as the “First Review Committee”) met four times, where scholars and practitioners in Green Bonds discussed the details of the Guidelines based on the following three basic approaches:

(i) Due consideration should be given to consistency with the Green Bond Principles, which are widely accepted around the world;

(ii) The Guidelines should reflect the immature market situation in Japan, where Green Bond issuance and investment have not been actively implemented (including lowering costs and the clerical workload);

(iii) In an effort to ensure the safety of investments in Green Bonds by domestic and overseas investors, the Guidelines should prevent “green-wash” bonds (bonds labelled as “green” despite the fact that they have no environmental benefits, or that their proceeds have not been appropriately allocated to Green Projects) from being issued and invested in.

In December 2016, a meeting for opinion exchange on Green Bonds was held with the First Review Committee members and European and American financial market participants well-versed in the Green Bond Principles to exchange views on the Guidelines.

In February 2017, the Third-Party Committee on Green Bond Guidelines (provisional name) met to allow for an examination of the Guidelines by independent third parties who had no direct stake in the Guidelines.

From Thursday, January 26 to Tuesday, February 14, 2017, public comments regarding the Guidelines were invited. These were later reviewed and discussed (as appropriate) by the First Review Committee.

Based on these discussions, the Guidelines were developed by the Ministry of the Environment, Japan.

Revision of Green Bond Guidelines 2020 and Formulation of Green Loan and Sustainability Linked Loan Guidelines 2020

The "Review Committee on Green Bonds" (hereinafter referred to as the "Second Review

Committee") was held three times between July 2019 and February 2020. Academics and practitioners related to Green Bonds discussed the content of the Guidelines among other related matters while taking into account three basic concepts adopted at the First Review Committee.

In August 2019, a Green Bond Dialogue was held to exchange views on the content of the Guidelines and other related issues between the members of the Review Committee and market participants with expertise on the Green Bond Principles, the Green Loan Principles, and the Sustainability-Linked Loan Principles.

Public comments were accepted between Thursday, December 12, 2019, and Friday, January 10, 2020, and called for a wide range of opinions on the content of the Guidelines. In addition, opinions were also sought from relevant overseas organizations regarding the contents of these guidelines. These opinions were reviewed at the Review Committee and were reflected in the discussions of the Review Board as appropriate.

Based on these discussions, the Guidelines were developed by the Ministry of the Environment, Japan of Japan. Meetings of the Green Bonds Review Committee (hereinafter referred to as the “Second Review Committee”) were held three times between July 2019 and February 2020. Academics and practitioners related to Green Bonds discussed the content of the Guidelines among other related matters, while taking into account the three basic approaches adopted by the First Review Committee.

In August 2019, a Green Bond Dialogue was held to exchange views on the content of the Guidelines and other related issues between the members of the Second Review Committee and market participants with expertise on the Green Bond Principles, the Green Loan Principles, and the Sustainability-Linked Loan Principles.

Public comments were accepted between Thursday, December 12, 2019, and Friday, January 10, 2020, and called for a wide range of opinions on the content of the Guidelines. In addition, opinions were also sought from relevant overseas organizations regarding the content of the Guidelines. These opinions were reviewed by the Second Review Committee and reflected in the discussions of the Committee as appropriate.

Based on these discussions, the Guidelines were developed by the Ministry of the Environment, Japan of Japan.

The “Green Finance Committee” met four times between December 2021 and June 2022. The contents of the Guidelines were discussed by experts and practitioners in the field of Green Bonds, etc., based on the revision of international principles by ICMA and other organizations, as well as market and domestic policy trends.

In February 2022, an “Opinion Exchange Meeting of the Green Finance Committee” was held to exchange opinions on the contents of the Guidelines among the committee members and market participants with knowledge in various fields. A wide range of opinions were exchanged, including those of operating companies (issuers) and data vendors, in addition to those of banks, securities companies, and consultants/external reviewers.

In addition, public comment on the Guidelines was called for from April 22 to May 20, 2022, to solicit a wide range of opinions on the contents of these Guidelines. We also asked relevant international organizations for their opinions on the content of the Guidelines. These opinions were considered by the study group and reflected in the discussions of the study group as necessary.

Based on these discussions, the Ministry of the Environment, Japan (MOE) formulated these Guidelines.

List of Members of the Green Finance Committee in 2022

Chairperson	Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki University of Economics
Committee member	Kazuyuki Aihara	Senior Officer, Head of ESG products, Debt Capital Market Department, Nomura Securities Co., Ltd.
Committee member	Eiichiro Adachi	Senior Counselor, The Japan Research Institute, Limited
Committee member	Takahiro Ueno	Senior Researcher and R&D Manager (Sustainability), Socio-Economic Research Center, Central Research Institute of Electric Power Industry）
Committee member	Shunsuke Oshida	Managing Director, Head of Credit Research, Japan,. Manulife Investment Management (Japan) Limited
Committee member	Atsuko Kajiwara	Executive Officer, Head of Sustainable Finance Evaluation Department, Japan Credit Rating Agency
Committee member	Tadahiro Kaneko	Senior Deputy Head, Sustainability Division · Sumitomo Mitsui Banking Corporation
Committee member	Arisa Kishigami	Board member, Japan Sustainable Investment Forum (JSIF) Specialist, Sustainable Investment, Chonos Sustainability Ltd.
Committee member	Yoshio Shima	Professor, Faculty of Business Administration, Tamagawa University
Committee member	Masato Takebayashi	Associate Director, Asia Pacific Research, Sustainalytics
Committee member	Ryosuke Tamura	Executive Director, General Manager of ESG Finance & Product Innovation Division Investment Banking Business Unit
Committee member	Mana Nakazora	Chief Credit Strategist / Chief ESG Strategist Vice Chairperson Global Markets, Japan BNP Paribas Securities (Japan) Ltd
Committee member	Masami Hasegawa	Director, Environment & Energy Policy Bureau Keidanren (Japan Business Federation)
Committee member	Maiko Hachiya	Development Bank of Japan Inc. Sustainable Solution Department Senior Vice President
Committee member	Toshikazu Hayashi	Chief Director, Nippon Life Global Investors Europe Plc
Committee member	Reiko Hayashi	Director and Deputy President, BofA Securities Japan, Co., Ltd.

Committee member	Yuichi Honda	Line Manager, Responsible Investment Panning Center, Responsible Investment Dept The Dai-ichi Life Insurance Company, Limited
Committee member	Mari Yoshitaka	Mari Yoshitaka, Fellow, Principal Sustainability Strategist, Mitsubishi UFJ Research and Consulting Co., Ltd. *Title is as of June 16, 2022, when the fourth Committee was held.
Observer	Financial Servicies Agency, Ministry of Economy, Trade and Industry, Bank of Japan The Life Insurance Association of Japan, Japanese Bankers Association, Japan Investment Advisors Association、Japan Exchange Group、The Japanese Institute of Certified Public Association, Japan Securities Dealers Association	
Secretariat	Environment and Economy Division, Minister's Secretariat, the Ministry of the Environment, Japan The Japan Research Institute	

Green Finance Committee (Exchange Meeting)
List of the names of participants

[Banking Sector]	**[Securities Sector]**
Shiga Bank	Citigroup Global Markets Japan Inc.
Shinsei Bank	Daiwa Securities
Development Bank of Japan	Nomura Securities
Mizuho Bank	Mizuho Securities
Sumitomo Mitsui Banking Corporation	Mitsubishi UFJ Morgan Stanley
MUFJ Bank	Morgan Stanley MUFG Securities
Risona Holdings	BNP Paribas
Norinchukin	JP Morgan Securities Japan
	SMBC Nikko Securities

[Consulting & External Review Sector]	**[Business Company (Issuer) Sector]**
E&E Solutions Inc.	Ajinomoto Co., Inc

R&I

Japan Credit Rating Agency

Japan Research Institute

Mitsubishi UFJ Research & Consulting

DNV Business Assurance Japan K.K.

Sustainalytics

Kawasaki City

Japan Real Estate Asset Management

Tokyu Fudosan Holdidngs

Tokyo Metropolitan Government

TODA Coporation

East Japan Railway Company

NTT Finance Corporation

[Data Vendor Sector]

Refinitiv Japan K.K.

Bloomberg L.P.

FTSE Russell

MSCI Inc.

S&P Global Inc.

*S&P Global Inc. did not attend the opinion exchange meeting and responded in writing.

[Secretariat]

Environment and Economy Division, Minister's Secretariat, the Ministry of the Environment, Japan

The Japan Research Institute

List of Members of the Review Committee on Green Bonds / Green Loans, etc. in 2019

Chairperson	Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki University of Economics
Committee member	Kazuyuki Aihara	Senior Officer, Head of ESG products, Debt Capital Market Department, Nomura Securities Co., Ltd.
Committee member	Naoki Adachi	Representative Director of Response Ability Co., Ltd.
Committee member	Shinichiro Arie	Director, Head of Fixed Income Department, Investment Management Division, Amundi Japan Ltd.
Committee member	Yoshiyuki Arima	Representative of Japan, Finance Bureau of the World Bank
Committee member	Kosuke Ito	Director, Division of Financing,Treasury Department, Development Bank of Japan Inc.
Committee member	Takashi Uni	Deputy General Manager, Credit Investment Department, Nippon Life Insurance Company
Committee member	Hiroshi Kawakami	Joint General Manager, Syndicated Finance Structuring Department No.1, Mizuho Bank, Ltd.
Committee member	Kenji Kawamura	Professor of Commercial Law, Rikkyo Law School
Committee member	Ryo Saeki	Director, Bond Section, Budget Division, Bureau of Finance, Tokyo Metropolitan Government
Committee member	Yoshio Shima	Professor, Faculty of Business Administration, Tamagawa University
Committee member	Kazushi Shimizu	Executive Director, Department of Debt Capital Markets, Daiwa Securities Co., Ltd.
Committee member	Rin Shimizu	Vice President, Growth Industry Cluster Department, Sumitomo Mitsui Banking Corporation
Committee member	Masato Takebayashi	Associate Director, Asia Pacific Research, Sustainalytics
Committee	Ryosuke Tamura	Executive Director, Debt Capital Markets Division, Investment

member		Banking Business Unit, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
Committee member	Mana Nakazora	Deputy Chairman, Global Market Management Division, BNP Paribas Securities Co., Ltd.
Committee member	Amane Yamazaki	Office Manager, Sustainable Business Office, MUFG Bank, Ltd., Responsible for Environmental and Social Risk Management

Observer	Japanese Bankers Association
Observer	The Japanese Institute of Certified Public Accountants
Observer	Japan Securities Dealers Association
Secretariat	Environment and Economy Division, Minister's Secretariat, the Ministry of the Environment, Japan
	Institute for Global Environmental Strategies

List of Participants in Opinion Exchange Meetings on Green Bonds, Green Loans, etc.

[Banking Sector]

<Attendees>

Kosuke Ito	Director, Division of Financing,Treasury Department, Development Bank of Japan Inc.
Hiroshi Kawakami	Joint General Manager, Syndicated Finance Structuring Department No.1, Mizuho Bank, Ltd.
Rin Shimizu	Vice President, Growth Industry Cluster Department, Sumitomo Mitsui Banking Corporation
Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki University of Economics
Amane Yamazaki	Sustainable Business Office, MUFG Bank, Ltd., Responsible for Environmental and Social Risk Management

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Japanese Bankers Association

List of Participants in Opinion Exchange Meetings on Green Bonds, Green Loans, etc.

[Securities Sector]

<Attendees>

Kazuyuki Aihara	Senior Officer, Head of ESG products, Debt Capital Market Department, Nomura Securities Co., Ltd.
Sachie Ii	Head of Sustainable Finance Office, Corporate Finance Department, Mizuho Securities Co., Ltd.
Yuki Ukegawa	Vice President, Debt Capital Markets, JP Morgan Securities Co., Ltd.
Koji Ohmachi	Managing Director, Capital Markets Origination, Citigroup Global Markets Japan Inc.
Masataka Sampei	Managing Director, Deputy Head of Capital Markets, SDGs Finance, SMBC Nikko Securities Inc.
Yoshio Shima	Professor, Faculty of Business Administration, Tamagawa University
Kazushi Shimizu	Executive Director, Department of Debt Capital Markets, Daiwa Securities Co., Ltd.
Masanori Suzuki	Manager of Debt Capital Markets Group, Capital Markets Department, Tokai Tokyo Securities Co., Ltd.
Ryosuke Tamura	Executive Director, Debt Capital Markets Division, Investment Banking Business Unit, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
Mana Nakazora	Deputy Chairman, Global Market Management Division, BNP Paribas Securities Co., Ltd.
Munetada Nakayama	Senior Manager, Syndication Department, SBI SECURITIES Co., Ltd.
Reiko Hayashi	Director of the Board, Deputy President, Managing Director, Merrill Lynch Japan Securities Co., Ltd.
Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki University of Economics

<Observer>

Japan
Securities
Dealers
Association

List of Participants in Opinion Exchange Meetings on Green Bonds, Green Loans, etc.

[Consulting & External Review Sector]

<Attendees>

Akira Ishiwata	Head of Credit Rating Planning and Research Office and Chief Analyst, ESG Promotion Department, Rating and Investment Information, Inc.
Atsuko Kajiwara	General Manager, Head Chief Sustainable Finance Analyst, Sustainable Finance Evaluation Department, Japan Credit Rating Agency, Ltd.
Masato Kanedome	Technical Assessor, Engineering Department, DNV GL Business Assurance Japan K. K.
Yoshio Shima	Professor, Faculty of Business Administration, Tamagawa University
Naoko Hase	Manager, ESG Research Center, Center for the Strategy of Emergence, Japan Research Institute, Co., Ltd.
Masato Takebayashi	Associate Director, Asia Pacific Research, Sustainalytics
Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki University of Economics

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The Japanese Institute of Certified Public Accountants

Green Bond Review Committee
List of Names

<Chairman>

Takeshi Mizuguchi, Professor, Faculty of Economics, Takasaki City University of Economics

<Committee Member>

Naoki Adachi, President, Response Ability, Inc.

Kazuhiko Abe, Executive Officer, PwC Sustainability LLC

Toru Inoue, General Manager of the Investment Banking, Capital Market, and Infrastructure and Structured Finance Departments, Goldman Sachs Japan Co., Ltd.

Daisuke Kawaguchi, Section Chief, Credit Investment Department, Nippon Life Insurance Company

Yoshio Shima, Professor, College of Business Administration, Tamagawa Academy and University

Masayasu Sugawara, Public Bond Section Chief, Accounting Division, Bureau of Finance, Tokyo Metropolitan Government

Ko Teramoto, General Manager, Planning Department, Office REIT Division, Kenedix Real Estate Fund Management, INC.

Ken Tokuda, Senior Deputy Section Chief, Overseas Origination Section and Second Origination Section, Debt Capital Market Department, Daiwa Securities Co., Ltd.

Mototsugu Matsuoka, Assistant Manager and Treasury Section Chief, Treasury Department, Development Bank of Japan Inc.

<Observer>

Keiko Kishigami, Executive Director, Japanese Institute of Certified Public Accountants

Masato Maruno, General Manager, Public Bonds and Financial Products Department, and Market Statistics Office Chief, Self-regulation Board, Japan Securities Dealers Association

<**Secretariat**>

Environment and Economy Division, Environmental Policy Bureau, Ministry of the Environment,

Green Bond Opinion Exchange Meeting
List of the names of participants

<**Market Participants**>

Dai Kitatani	Vice President, Capital Market Department, Citigroup Global Markets Japan Inc.
Hiroshi Aoki	General Manager, Capital Market Department, Tokyo Branch, Credit Agricole Securities Asia BV
Masanori Kato	Managing Director and General Manager, Bond and Capital Market Department, JP Morgan Securities Japan, Co., Ltd.
Yuki Ukegawa	Associate, Bond and Capital Market Department, JP Morgan Securities Japan, Co., Ltd.
Reiko Hayashi	Executive Officer, Managing Director, and General Manager, Bond and Capital Market Department, Merrill Lynch Japan Securities
Ryota Suzuki	Managing Director and General Manager, Bond and Capital Market Department, Capital Market Division, Merrill Lynch Japan Securities

<**Green Bond Review Committee Members**>

Kazuhiko Abe	Executive Officer, PwC Sustainability LLC
Toru Inoue	General Manager of the Investment Banking, Capital Market, and Infrastructure and Structured Finance Departments, Goldman Sachs Japan Co., Ltd.
Daisuke Kawaguchi	Section Chief, Credit Investment Department, Nippon Life Insurance Company
Yoshio Shima	Professor, College of Business Administration, Tamagawa Academy and University
Ken Tokuda	Senior Deputy Section Chief, Overseas Origination Section and Second Origination Section, Debt Capital Market Department, Daiwa Securities Co.,

	Ltd.
	(Attendance by proxy: Yuma Morisawa, Assistant Section Chief, Overseas Origination Section, Debt Capital Market Department)
Mototsugu Matsuoka	Assistant Manager and Treasury Section Chief, Treasury Department, Development Bank of Japan Inc.
Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki City University of Economics

<**Observers>**

Keiko Kishigami	Executive Director, The Japanese Institute of Certified Public Accountants
Masato Maruno	General Manager, Public Bonds and Financial Products Department, and Market Statistics Office Chief, Self-regulation Board, Japan Securities Dealers Association

Third-Party Committee on Green Bond Guidelines

<**Committee Member**>

Toshihiko Goto	Supreme Advisor, Japan Sustainable Investment Forum
	Representative Trustee, Sustainability Forum Japan
Takejiro Sueyoshi	Special Advisor, UNEP Finance Initiative
Itaru Yasui	Professor Emeritus at the University of Tokyo
	President, Institute of Promoting Sustainable Societies

<**Observer**>

Takeshi Mizuguchi	Professor, Faculty of Economics, Takasaki City University of Economics

<**Secretariat>**

Environment and Economy Division, Environmental Policy Bureau, Ministry of the Environment, Japan