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# Development of Transition Finance in Japan and Future Challenges

## Promotion of Finance for a Decarbonized Society in 2050

A global movement to realize a decarbonized society has been accelerating since the 2015 international agreements on Sustainable Development Goals (SDGs) and the Paris Agreement. In Japan, then-Prime Minister Yoshihide Suga declared in October 2020 that Japan would aim to become a decarbonized society by 2050 by reducing greenhouse gas (GHG) emissions to virtually zero and achieving carbon neutrality.

Realizing a decarbonized society will require the expansion of industries and businesses that do not emit GHGs. However, some industries and businesses emit large amounts of greenhouse gases and are technically difficult to decarbonize in a short period of time. In order to achieve a decarbonized society, it is necessary to support a broader transition, including energy conservation and fuel conversion, in addition to addressing already decarbonized businesses.

A smooth transition to a decarbonized society is expected to require significant financial resources. In the case of

Japan, the government estimates that in order to achieve the 2050 carbon neutrality target as well as to strengthen industrial competitiveness and achieve economic growth at the same time, public and private investment in green transformation (GX) will need to exceed JPY150 trillion over the next ten years. Against this background, the government has taken various measures to promote transition finance toward the realization of a decarbonized society since the beginning of the 2020s. Transition financing has also been growing steadily since then.

This paper examines the development of transition finance and the financing situation in Japan and discusses the challenges for realizing a decarbonized society.

## Development of Transition Finance

This history of transition finance started with the issuance of the world's first transition bond in July 2017 by Castle Peak Power Finance Company Limited, a subsidiary of a Hong Kong electric power company. In December 2020, the International Capital Market Association (ICMA) published

its first Climate Transition Finance Handbook (CTFH), contributing to greater global awareness of transition finance.

In Japan, the Financial Services Agency (FSA), the Ministry of Economy, Trade and Industry (METI), and the Ministry of the Environment (MOE) published Japan's Basic Guidelines for Climate Transition Finance (the Basic Guidelines) in May 2021. Based on the four elements outlined in the ICMA's CTFH (issuer's climate transition strategy and governance, business model environmental materiality, climate transition strategy and targets to be science-based, and implementation transparency), the Basic Guidelines describe issues related to disclosure, matters to be disclosed and supplementary information, and issues related to independent reviews.

In addition, METI has developed technology roadmaps that provide concrete directions for eight GHG-intensive industries (iron and steel, chemicals, electric power, gas, oil refining, cement, pulp and paper, and automobiles) to follow from FY2021 as they seek to transition to carbon neutrality in 2050. The roadmap is intended to be referenced by companies as they consider climate change measures funded by transition finance. It is also intended as a reference for financial institutions to determine whether companies' strategies and initiatives toward decarbonization qualify them to use transition finance when procuring funds. In addition to METI's roadmap, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

has developed a roadmap for the shipping and aviation industries. Combined, these two roadmaps cover approximately 80% of Japan's carbon dioxide (CO2) emissions.

METI also has been implementing its Transition Finance Model Project and Subsidy for Global Warming Countermeasures Promotion Project since FY2021 to accumulate and disseminate information about projects considered to be good examples of transition finance. Model projects and subsidized projects receive government support to cover the costs of external assessments of the project's eligibility for transition finance. In June 2023, the FSA, METI, and MOE formulated a guidance for fixed-income investors that summarizes the key points to follow up on after providing funds through transition finance.

In addition to the government's measures, the Funds-Supplying Operations to Support Financing for Climate Change Responses (Climate Response Financing Operations) launched by the Bank of Japan (BOJ) in December 2021 may have helped to stim-

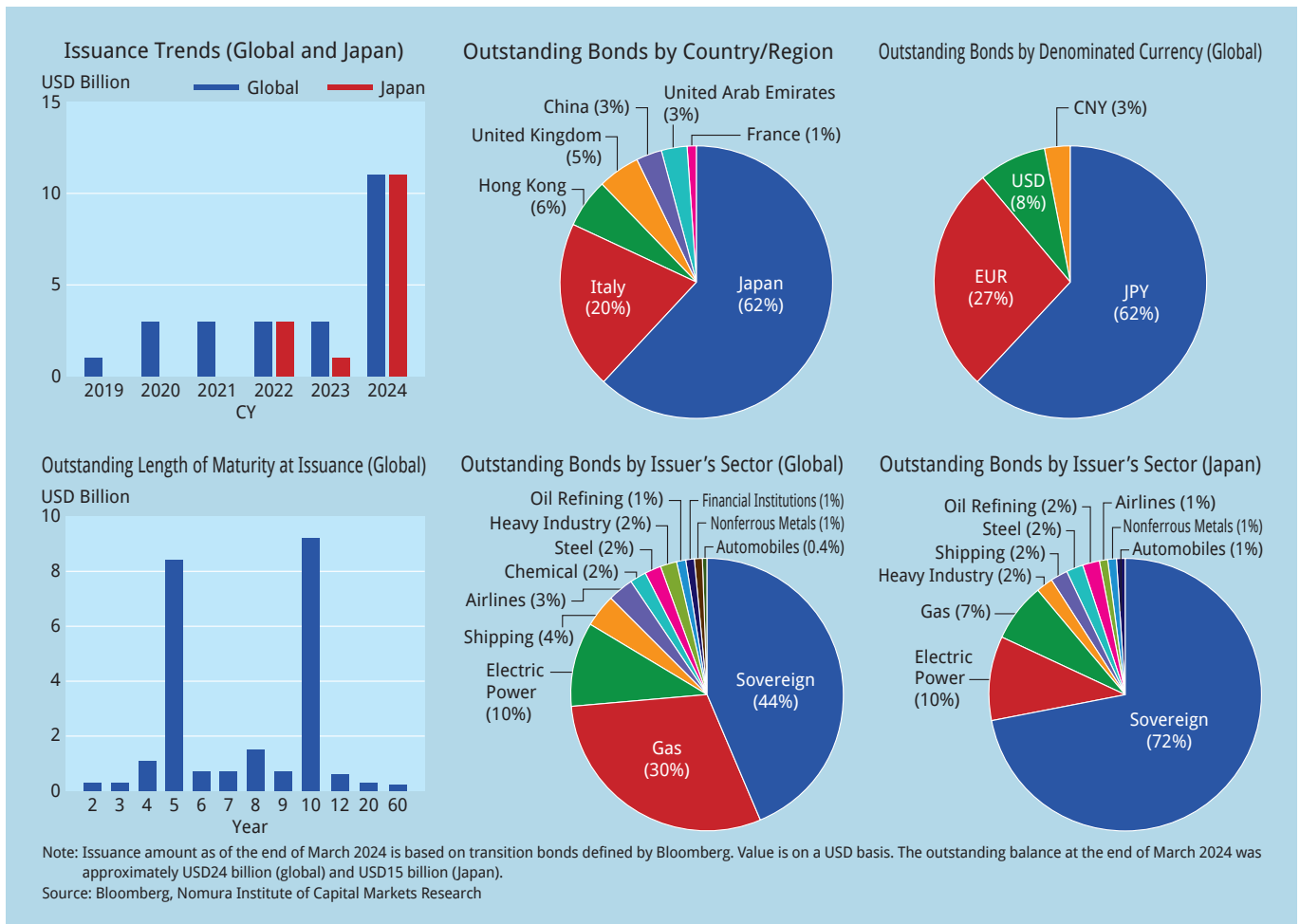
ulate demand for investment in and financing of transition finance projects. The BOJ's Climate Response Financing Operations provide long-term funds at 0%<sup>1</sup> interest to financial institutions that invest in and lend to climate-change related projects, including projects qualifying for transition finance.

In February 2024 the Japanese government issued the world's first sovereign climate transition bonds, under its GX Economy Transition Bond program. The bonds issued in February were climate transition interest-bearing government bonds (JGBs)<sup>2</sup> with a total issuance amount of approximately JPY1.6 trillion. The Japanese government plans to issue a total of JPY20 trillion worth of GX economy transition bonds over the ten years from FY2023 to support upfront investment in the promotion of its green transformation. Use of proceeds is to support the development of innovative technologies and capital investment that will contribute to the decarbonization of energy and raw materials and enhance the profitability of companies.

## Current State of Transition Bond Issuance

Transition bonds have been issued around the world since 2017. The first issuance in Japan was in July 2021, and since then the number of Japanese issuers and total issuance amount have increased steadily. The Japanese government's first sovereign climate transition bond issued in February 2024 increased the outstanding issuance of transition bonds by Japanese issuers as of the end of March 2024 to USD15 billion, accounting for about 62% of total global issuance (USD24 billion, Figure 1). With the issuance of its first climate transition bond, the Japanese government is now the

Figure 1: Issuance of Transition Bonds



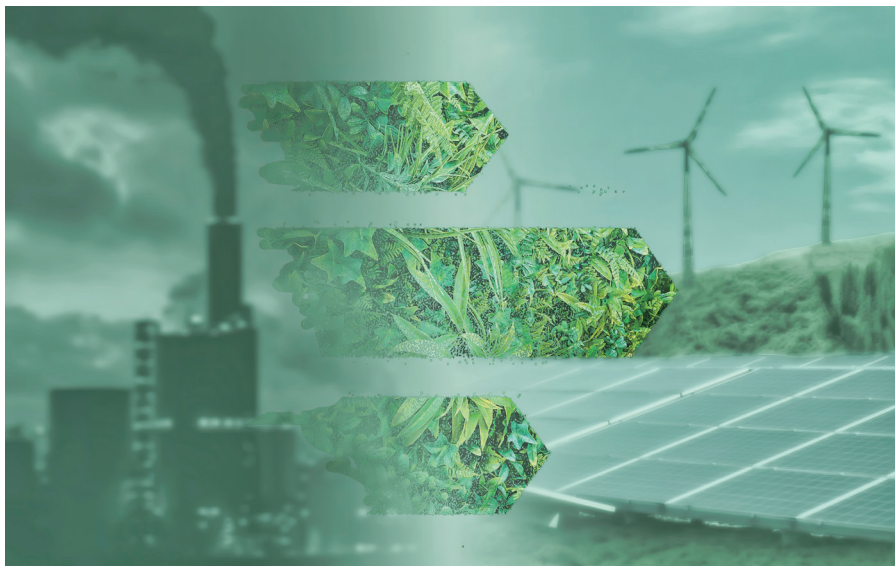
largest issuer of transition bonds in Japan. However, other major issuers include companies in industries with relatively large GHG emission levels, including electric power, gas, and oil refining.

Issuance of transition bonds in countries and regions other than Japan, however, has not expanded steadily. The main reason seems to be the ICMA's CTFH is simply a guideline for disclosures when implementing transition finance and does not provide information on the eligibility of projects, unlike the Green Bond Principles (GBP). For this reason, financing that expresses the transition strategy of issuers outside Japan tends to be conducted through sustainability-linked bonds (SLB), which are already widespread in financial markets and designed as general-purpose corporate instruments. As of the end of March 2024, transition bonds have a shorter history than green bonds and other sustainable finance debt instruments, and their total issuance to date is smaller. The number of countries, regions, and industries represented by transition bond issuers is also limited. However, in the near future, with the support of various promotional measures, the issuance of transition bonds may increase and become more widespread.

## Challenges for Realizing a Decarbonized Society

In Japan, transition finance has increased steadily, thanks in part to the government's multi-layered measures promoting its use for financing the transition to a decarbonized society. As a result, Japan has established a presence as a global leader in transition finance. That said, Japan needs to address three main issues to ensure its use of transition finance contributes to the realization of a decarbonized society.

First, Japan needs to make efforts to create a positive image of transition finance in international financial markets. Many countries have a negative image of transition finance due to concerns that it may extend the life of industries with high GHG emissions. In order to dispel this negative image, it is important to show the validity of the transition strategy. Furthermore, it is needed to take measures such as enhanc-



ing information disclosure by issuers and continuing to explain, through dialogue with investors and other stakeholders, that transition finance truly contributes to the transition to a decarbonized society and to gaining credibility in international financial markets.

Second is the need for greater international cooperation. Many countries are implementing measures to increase the credibility and transparency of transition finance. In particular, the Association of Southeast Asian Nations (ASEAN), which needs to use transition finance to move to a decarbonized society, has followed the European Union (EU) and created a classification for transition activities in its ASEAN Taxonomy for Sustainable Finance. Although Japan has not formulated such a taxonomy, it may be meaningful for Japan to cooperate with other countries' systems in order to spread the use of transition finance globally.

Third, Japan needs to promote measures to ensure the smooth acceptance of its climate transition government bonds by financial markets. Climate transition government bonds account for the largest share of Japan's transition bond market and therefore may have a significant impact on financial markets as a whole. Therefore, the Japanese government needs to make constant efforts to ensure its bonds are smoothly adopted by investors, including efforts to improve the reliability of impact reporting through external audit/verification. Furthermore, it may need to consider expanding the investor base by issuing climate transition bonds to individual investors as well as institutional investors.

### Notes

- 1 The interest rate was revised from 0% to 0.1% in March 2024.
- 2 GX Economy Transition Bonds are a type of Japanese government bond to be redeemed by FY2050 using fossil fuel levies and specific business operator contributions. GX Economic Transition Bonds can be issued separately under the name CT government bonds. Another option is to issue them as ordinary government bonds.

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Prior to joining NICMR, Enatsu was a credit research analyst for various financial institutions including Citigroup, Barclays, and Merrill Lynch. She earned a MBA from University of Oxford and a PhD in Economics from Saitama University.