

**EXECUTIVE
BOARD
MEETING**

SM/22/61
Correction 1

March 31, 2022

To: Members of the Executive Board

From: The Secretary

Subject: **Japan—Selected Issues**

Board Action: The attached corrections to SM/22/61 (3/18/22) have been provided by the staff:

Evident Ambiguity **Pages 42 (para 4, line 5 “fiscal year 2030” “fiscal year 2013”) and 52**

Factual Errors Not Affecting the Presentation of Staff's Analysis or Views **Pages 42 (para 4, lines 4-6), 56, 63**

Questions: Mr. Salgado, APD (ext. 34182)
Mr. Lopez Murphy, APD (ext. 37647)

of climate-induced natural disasters on Japan's medium-term growth, similar to its adverse demographic impact (see text chart). Reduced economic activity resulting from an increase in climate-related disruptions will likely cascade into lower tax revenues, while spending needs accelerate with post-disaster relief and rebuilding of damaged infrastructure. These would lead to weakening fiscal and public debt positions.

B. Japan's Climate Change Objectives and Policy Framework

4. Japan has pledged to achieve carbon neutrality by 2050. Japan, currently the world's sixth-largest emitter of carbon dioxide, committed in October 2020 to reducing net greenhouse gas emissions to zero by 2050. The new goal is in line with targets set by the European Union and the United States. In April 2021, Japan raised its medium-term target to reduce its greenhouse gas emissions by 46 percent relative to 2013 levels by in fiscal year 2030 from its fiscal year 2013 levels, up from its earlier goal of 26 percent, ~~and will continue its efforts to further reduce its emissions by 50 percent.~~

5. Japan's climate change policies focus on policies to change the energy mix as well as mitigation measures. The Government of Japan (GoJ) plans to increase the share of non-fossil sources including renewables and nuclear to about 60 percent of total power generation by 2030, replacing the current high share of fossil fuels of about 80 percent. In 2012, Japan introduced a carbon pricing mechanism, named the Tax for Climate Change Mitigation (TCCM), on fossil fuel in addition to the Petroleum and Coal Tax. The TCCM tax rate was gradually increased to 289 yen (about \$3) per ton of CO₂ emissions in 2016. The revenues from TCCM of about 0.05 percent of GDP have been spent on measures to expand renewable energy and enhance energy efficiency. A voluntary cap-and-trade emission trading mechanism was implemented in Tokyo Metropolitan City and Saitama Prefecture during 2006 and 2012. A Forest Environment Transfer Tax that was introduced in April 2019 with the aim to improve forest management and thereby contribute to CO₂ reduction.

6. Japan has strong adaptive capacity to handle risks to physical exposures. The annual average of damages caused by weather-related natural disasters appear to be negligible in terms of Japan's gross domestic product (GDP), significantly lower than that of G20 and Asian economy peers. Japan also ranks high on its capacity to cope with weather-related natural disasters, thanks to its well-designed National Adaptation Planning to mitigate the disruptions from weather shocks and advanced adaptive technology built for climate resilience. In this regard, Japan has made significant contributions for mitigating risks of water-related disasters around the world through disseminating knowledge, experiences, and technology transfer, particularly for developing economies.

7. Japan aims at achieving its climate change commitments in a growth-friendly way. In December 2020, the GoJ laid out a green growth strategy to facilitate private investment through public funding, tax incentives, changes in regulations and standards, and public-private partnerships, as well as green finance (see *2022 Japan: Selected Issues* paper "Climate Finance in Japan"). In addition, the GoJ pledged a 2 trillion-yen (US\$18 billion or 0.4 percent of GDP) fund over ten years to promote green investment and innovation including renewables and hydrogen, and budgeted for public investment on disaster-resilient infrastructure of about 6 trillion yen (US\$55 billion or

CLIMATE FINANCE IN JAPAN¹

The government of Japan has emphasized the need to develop a financial system that can support the transition to a low carbon economy and manages the financial stability implications of the transition and the impact of climate change. Regulatory initiatives are underway to achieve these goals yet more will be needed. Green financial products and markets are developing but remain still small. Climate-related reporting and disclosure, important for the development of green financial markets and the management of financial stability risks, are still limited. Progress is being made on assessing the financial risks associated with climate change.

A. Introduction and Regulatory Approaches

1. Mitigating and adapting to climate change will require large investments from the private sector.

Japan's green growth strategy recognizes the need to mobilize private sector investment including in the decarbonization of energy production, industrial processes, transport, and housing. The development of green financial products and markets can contribute to this goal, but carbon pricing and other fiscal measures are essential to achieve net zero carbon emissions by 2050 ([SIP 4 see 2022 Selected Issues paper "Climate Change Policy Options"](#)). They are also paramount to provide price signals for the private sector to efficiently allocate capital toward climate-friendly activities and to manage climate risk exposures.

2. Climate change poses risks to the financial system and the wider economy.

Policymakers, regulators, and the private sector increasingly recognize climate change's important implications for the financial sector.² The potential impact of climate risks is large if global mitigation efforts are insufficient. Climate risks are also nonlinear, hard to estimate, and depend on actions taken in the next years. Losses from climate-related risks affect the financial system directly, through price impairment, reduced collateral values, and underwriting losses, and indirectly, through lower economic growth and tighter financial conditions.

3. Several government actors are involved in regulating and developing climate finance in Japan.

The Bank of Japan (BoJ) is integrating climate considerations in its monetary policy and financial stability functions. The Financial Services Agency (FSA) is analyzing and monitoring the financial implications of climate change, developing supervisory guidance for financial institutions, contributing to guidelines for green market development, and working on a climate scenario pilot jointly with the BoJ. The Ministry of the Environment (MoE) has released guidelines for green financial products and environmental disclosures and supports the development of green financial products and markets including through subsidy and pilot programs. The Ministry of Economy, Trade and Industry (METI) plays a role in providing incentive programs for sustainable finance and has jointly with MoE and FSA released guidelines for transition finance.

¹ Prepared by Jochen M. Schmittmann (OAP). The author thanks Yun Gao (OAP) for excellent research assistance.

² See Furukawa et al. (2020) for a survey of literature on the channels through which climate change affects the financial system.

broad themes: rapid convergence towards a common and consistent set of global disclosure standards; efforts towards a minimally accepted global taxonomy; the development and transparent use of well-defined and decision-useful metrics, certification labels, and methodological standards.

12. The government of Japan encourages climate reporting and disclosure. The MoE provides environmental reporting guidelines and the government encourages climate reporting in particular based on guidance from the Task Force on Climate-Related Financial Disclosures (TCFD). Major emitters of greenhouse gases (GHG) report emissions to MoE which is made public, however, matching this data with corporate financial data is challenging. Revisions to Japan's [Corporate Governance Code](#), which is not legally binding, require companies to develop a basic sustainability policy and disclose initiatives on sustainability, and, for prime market listed companies, to enhance the quality and quantity of climate-related disclosures based on TCFD recommendations or equivalent international frameworks. Based on the revised code, the Tokyo Stock Exchange is planning to require prime listed companies to make TCFD-consistent disclosures on a comply or explain basis.

13. Progress has been made on climate data in Japan, but more will be needed to develop green financial markets and manage climate risks. Japanese companies and organization are among the main supporters of TCFD (Figure 2.1). Meanwhile, GHG emission disclosures among Japanese firms are limited with about 14 percent of firms in the TOPIX stock index reporting narrow scope 1 emissions and fewer firms reporting scope 3 emissions that include a company's value chain (Figure 2.2).⁵ Environmental disclosures by Japanese firms lag those of firms listed in the European Union (EU) and the United States (US) although the gap is narrowing, according to Bloomberg (Figure 2.3). Private data providers strive to supply ESG data including on climate-related issues, but methodologies are often opaque and there is a lack of consistency across providers making it difficult for investors to rely on private ratings (Figure 2.4).

14. The government's and other stakeholders' focus on improving climate data and reporting is commendable but additional measures should be considered. It will be important to continue working on disclosure standards and guidelines in Japan and through international fora including the TCFD, the Financial Stability Board (FSB), the newly formed International Sustainability Standards Board (ISSB) and the NGFS. Broadening and deepening climate disclosures by corporates, financial institutions and investors is needed. Disclosure requirements in the [Corporate Governance Code](#) are welcome and consideration should be given to legally binding minimum disclosure requirements. Development of a green taxonomy in line with international developments or equivalent guidance on what constitutes a green activity would be useful. Certification labels and external reviews and assurances should be strengthened. Plans to develop a code of conduct for

⁵ Scope 1 emissions cover direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain. The lower reporting share in 2021 compared to 2020 is due to data submission lags.

the international level at the FSB and NGFS to advance methodologies and guidelines. Many Japanese FIs have made progress in analyzing their exposure to climate risks and putting in place strategies to address risks. These efforts need to be continued and intensified. As guidelines and methodologies advance, consideration should be given to mandatory climate risk management and disclosure practices.

E. Conclusion

26. Further policy efforts would strengthen Japan’s capacity to manage climate financial risks. Building on climate finance initiatives underway, priorities include improving data and disclosures, building expertise among financial institutions and regulators, and developing risk measurement and management approaches including scenarios. On data and disclosure, minimum compulsory disclosure requirements in addition to the legally non-binding requirements in the **€Corporate gGovernance €Code** should be considered and the scope of corporates and financial firms subject to reporting should be extended. Climate risk management guidelines for banks, insurers, and asset managers would support mainstreaming of climate risk assessments and promote common standards and plans to issue supervisory guidance for banks and insurers are welcome. The BoJ’s and FSA’s efforts on advancing climate finance research including through international cooperation in the context of the NGFS are commendable and will help mainstreaming climate finance. The publication of the BOJ’s climate strategy is welcome. The BoJ could study the merits of incorporating climate-related risks in its asset purchase and collateral policies.

27. The burgeoning market for green financial products will need an ecosystem that includes investor and issuer expertise, and data, ratings, and assurance providers to ensure the integrity of green finance instruments. The authorities play an important role in supporting the private sector through guidelines, for example the MOE’s green bond standards and the recently released transition finance guidelines, support schemes, and supervision. Data and disclosure improvements will also be needed to develop green financial markets. Labeling of financial products including investment funds could be considered to make green investments more accessible and provide quality assurances to end investors. Green taxonomies or equivalent approaches would support the private sector in classifying activities and reduce greenwashing and reputational risks.