



Japan Credit Rating Agency, Ltd. (JCR) announces the reviewed Climate Transition Bond Evaluation Results as follows.

The Government of Japan

Japan Climate Transition Bond (FY2024)

Affirmation



Issuer	The Government of Japan
Subject	10-year Japan Climate Transition Bonds (2nd) 5-year Japan Climate Transition Bonds (2nd)
Type	Interest-bearing government bonds
Issue Amount	10-year bonds: JPY 349.6 billion (Auction date: May 28, 2024) JPY 350.0 billion (Auction date: Oct. 22, 2024) 5-year bonds: JPY 349.6 billion (Auction date: Jul. 18, 2024) JPY 349.8 billion (Auction date: Jan. 29, 2025)
Interest Rate	10-year bonds: Nominal Coupon 1.0% (per annum) 5-year bonds: Nominal Coupon 0.5% (per annum)
Auction Date	10-year bond: May 28, 2024 and Oct. 22, 2024 5-year bond: Jul. 18, 2024 and Jan. 29, 2025
Redemption Date	10-year bond: Mar. 20, 2034 5-year bond: Jun. 20, 2029
Method of Redemption	Lump-sum redemption at maturity
Use of Proceeds	Projects that meet the eligibility criteria identified in the Japan Climate Transition Bond Framework based on the GX Promotion Strategy

Evaluation Overview

The purpose of this evaluation report is to review the status of funding allocation and impact related to the 10-year Japan Climate Transition Bonds (2nd) and the 5-year Japan Climate Transition Bonds (2nd) issued by the Government of Japan in FY2024 (collectively, or individually referred to as the "Japan Climate Transition Bonds (FY2024)", or the "Bonds").

The Bonds were issued under the Japan Climate Transition Bond Framework (the "Framework"¹) developed by the Government of Japan on November 7, 2023, and JCR assigned an overall evaluation of Green 1(T) to the bonds on May 31, 2024.

The proceeds of the Bonds supposed to comprise subsidies for research and development and capital investment that the Government of Japan secured in the FY2023-FY2024², as well as equity contributions to GX Acceleration Agency. All of these proceeds are intended for projects that significantly contribute to reducing GHG emissions in Japan, and are included in the Sector-Specific Investment Strategies formulated based on the GX Promotion Strategy (revised in February 2025 as the GX 2040 Vision).

The Government of Japan revised the Plan for Global Warming Countermeasures, the 7th Strategic Energy Plan, and the GX 2040 Vision in February 2025. In conjunction with the formulation and revision of these plans and visions, the Government revised the Framework in June 2025, and JCR conducted a review of the Framework in the same month. Furthermore, in January 2026, JCR conducted an additional review to confirm alignment with the new Climate Transition Bond Guidelines (CTBG)³ published by ICMA in November 2025, and maintained the evaluation of Green 1(T)(F). In this review, JCR reconfirmed that the revised Framework's transition strategy continues to satisfy the four elements required by the "Climate Transition Finance Handbook."⁴ Since then, JCR has confirmed that there have been no major changes in the Government of Japan's transition strategy and that it remains valid.

Regarding the criteria for selecting projects, JCR has confirmed that there have been no changes from the assumptions at the time of the initial evaluation and that the selection procedures were carried out in accordance with the processes defined in the Framework. JCR confirmed the status of the allocation of proceeds and confirmed that JPY 1,235.8 billion out of the total amount of JPY 1,392.0 billion⁵ raised through the Bonds was allocated to projects that were evaluated as eligible at the time of the initial evaluation by the end of November 2025. In addition, JCR evaluates that the management of unallocated proceeds is appropriate because it is planned to allocate the proceeds to the use of eligible proceeds as soon as possible.

After the review, JCR evaluated the Bonds at "gt1" for "Green/Transition Evaluation (Use of Proceeds)" and "m1" for "Management, Operation and Transparency Evaluation," and "Green 1(T)" for the overall "JCR Climate Transition Bonds Evaluation" based on JCR's Green Finance Evaluation Methodology. As a result, JCR concluded that the Bonds met the standards for the

¹ JCR have assigned overall evaluation of "Green 1(T)(F) to the Framework on same date (23d1036)

² JCR has confirmed through this evaluation process that the projects to which this bond has been allocated include the subsidy project under the FY2022 budget.

³ International Capital Market Association (ICMA) "Climate Transition Bond Guidelines 2025"
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/>

⁴ International Capital Market Association (ICMA) "Climate Transition Finance Handbook 2023"
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/>

⁵ Proceeds raised by the government from the market through the issuance of the Bonds (cash proceeds). The amounts of bids accepted to raise the Bonds is JPY 1,399.0 billion, and the difference from the proceeds is due to the variance between the face value and the issue price.

items required in the Green Bond Principles⁶, the Green Bond Guidelines⁷, the Climate Transition Finance Handbook and the Basic Guidelines for Climate Transition Finance⁸.

⁶ International Capital Market Association (ICMA), Green Bond Principles (2021)
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>

⁷ Ministry of the Environment Green Bond Guidelines (2022)
<https://www.env.go.jp/content/000062495.pdf>

⁸ Financial Services Agency, Ministry of Economy, Trade and Industry, Ministry of the Environment, Basic Guidelines for Climate Transition Finance (2021)
<https://www.meti.go.jp/press/2021/05/20210507001/20210507001-1.pdf>

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Review Items

This evaluation report aims to review the post-issuance allocation of proceeds and the impact report for the 10-year Japan Climate Transition bond (2nd) and the 5-year Japan Climate Transition bond (2nd) issued by the Government of Japan in FY2024. These two are collectively, or individually, referred to as the "Japan Climate Transition bonds (FY2024)" or "the Bonds."

The Bonds were issued under the Japan Climate Transition Bond Framework (the "Framework"⁹) developed by the Government of Japan on November 7, 2023, and JCR assigned an overall evaluation of Green 1(T) to the bonds on May 31, 2024.

In this evaluation report, the following items will be verified, with particular emphasis on those whose content has changed compared to the previous assessment.

1. Alignment with the items required in the Climate Transition Finance Handbook, etc.;

Japan's medium- to long-term economic policy and transition strategy, which the Government of Japan referred to when implementing Transition Finance, remain unchanged from the time of Evaluation of the Climate Transition Finance. If there are any changes, JCR will examine whether they are important environmental issues in Japan and are appropriate.

2. Use of Proceeds;

The classification of the eligibility criteria for the Transition Finance and the use of proceeds remain unchanged from what the issuer specified at the time of evaluation of the Climate Transition Finance. If there are any changes, JCR will examine whether they retain the eligibility of transition after the changes.

3. Selection Criteria and Processes for Use of Proceeds;

The objectives of the Transition Finance, the selection criteria and processes and other relevant processes remain appropriate.

4. Management of Proceeds;

The Government of Japan continues to have a system and internal functions in place to ensure that the proceeds raised through the Transition Finance are allocated to eligible projects and that the allocation status are easily tracked and managed.

5. Reporting;

The status of funding allocation is or will be properly disclosed. The impact of projects that the proceeds of the existing bonds is used for are or will be properly calculated and disclosed in the way specified by the issuer at evaluation of the Climate Transition Finance.

⁹ JCR assigned overall evaluation of "Green 1(T)(F) to the Framework on same day(23d1036)

Review Contents

1. Alignment with the items required in the Climate Transition Finance Handbook, etc.

1-1. Japan's Economic Policy and Transition Strategy

The Government of Japan revised the Plan for Global Warming Countermeasures in February 2025 and formulated the 7th Strategic Energy Plan and the GX2040 Vision. An overview of these revisions is as follows.

<The Plan for Global Warming Countermeasures>

The Government of Japan established goals set forth in the Paris Agreement (keep the global temperature rise well below 2 °C and to pursue efforts to limit the temperature increase even further to 1.5 °C) and set out the basic principles for promoting global warming countermeasures, such as realizing decarbonized society for net-zero by 2050, the integrated improvement of the environment, economy and society and the close cooperation with citizens and other parties concerned in the Act on Promotion of Global Warming Countermeasures revised in March 2021. The goal of reducing GHG by 46 % in FY2030 from its FY2013 levels as an interim target was announced, adding to continue strenuous efforts on its challenge to meet the lofty goal of cutting its emission by 50 % in the Plan for Global Warming Countermeasures revised in October 2021, based on the revised the Act on Promotion of Global Warming Countermeasures.

In February 2025, a revision of the Plan for Global Warming Countermeasures Plan was carried out, setting targets for FY2035 and FY2040. According to it, the targets are set to reduce GHG emissions by 60% in FY2035 and by 73% in FY2040, respectively, from its FY2013 levels. As for the current trend in Japan's GHG emissions, the total GHG emissions for the FY 2023 amounted to 1.071 billion tons-CO_{2e}, which is approximately a 23.3% reduction (324.40 million tons-CO_{2e}) compared to the total emissions of the FY2013 (1.395 billion tons-CO_{2e}).

<The 7th Strategic Energy Plan and the GX2040 Vision >

In the 6th Strategic Energy Plan decided by the Government of Japan in a cabinet meeting in October 2021, the government introduced the concept of "Green Transformation (GX)" which aims to shift the industrial and social structures centered on fossil energy since the Industrial Revolution to those centered on clean energy.

Starting in 2022, the GX Implementation Council chaired by the Prime Minister and composed of experts from government, private sector, and academia was held, and in 2023, the "Basic Policy for Realizing GX" was compiled. Furthermore, the GX Promotion Act and the GX Decarbonized Power Act were enacted in the same year, establishing a framework for promoting initiatives toward the "Pro-Growth Carbon Pricing Concept." Also, as a concrete strategy for the implementation of a series of policies, the "GX Promotion Strategy" was approved by the Cabinet in July 2023 based on the GX Promotion Act.

The 7th Strategic Energy Plan approved by the Cabinet in February 2025 highlights changes since the 6th Strategic Energy Plan, such as the Russian invasion of Ukraine, increased economic security demands due to tensions in the Middle East, and increased power consumption due to green transformation (GX) and digital transformation (DX). It emphasizes that securing decarbonized power sources at internationally competitive prices is directly linked to Japan's industrial competitiveness. The plan discusses aiming for a balanced power supply composition that avoids excessive dependence on specific sources or fuels, from the perspective of simultaneously ensuring a stable energy supply and decarbonization. It aims to maximize

the use of renewable energy, nuclear power, and other power sources that contribute to energy security and have high decarbonization effects.

In addition, regarding the GX Promotion Act, a revised law that includes the legalization of the emissions trading system, the implementation of concrete measures for collecting fossil fuel surcharges, and the establishment of financial support for the GX field was enacted in May 2025. Furthermore, the GX Promotion Strategy has been revised in February 2025 as the "GX2040 Vision," taking into account the increased possibility of power demand in line with the intensification of international affairs and the progress of GX and DX.

1-2. Alignment with the items required in the Climate Transition Finance Handbook, etc.

The Government of Japan revised this Framework in June 2025 in line with the formulation and revision of the above plans and vision. In the same month, JCR conducted a review assessment of the revised Framework. In addition, to further confirm alignment with the new guidelines on climate transition finance -ICMA's Climate Transition Bond Guidelines (CTBG) published in November 2025- a review assessment was conducted in January 2026, and a maintained rating of Green 1(T)(F) was provided. In that assessment, JCR confirmed that the transition strategy set out in the revised Framework conforms to the four elements required by the CTFH. Thereafter, JCR has confirmed that Japan's transition strategy has not undergone any major changes and remains valid.

Below, JCR reprints the assessment it conducted at the time of review assessment in January 2026.

Element 1. Issuer's climate transition strategy and governance

1. Does the issuer who is financing proceeds have a transition strategy for climate change mitigation?

The Government of Japan has made clear in the Act on Promotion of Global Warming Countermeasures its aim to achieve carbon neutrality by 2050, and to implement the necessary measures to achieve this. Additionally, the Plan for Global Warming Countermeasure revised in 2021, it has set a 2030 target, aligned with the goals agreed upon in the Paris Agreement, to reduce GHG emissions by 46% in FY2030 from its FY2013 levels, and has established reduction targets for each source of emissions for FY2030 compared to FY2013. Also, in February 2025, a revision of the Plan for Global Warming Countermeasures was conducted, setting reduction targets that Japan aims to reduce its GHG by 60% in FY2035 and by 73% in FY2040, respectively, from its FY 2013 levels. For FY2040, reduction targets by emission source are being established in the same manner as for the FY2030.

Concrete measures to achieve the realization of GX towards these aforementioned targets are outlined as the GX2040 Vision (see Table 3 above). In the GX2040 Vision, the Government of Japan is focusing on providing a longer-term direction than the existing GX promotion strategy, to enhance the foreseeability of investment towards GX amidst increasing uncertainties about future prospects. This includes policies on the GX industrial structure and GX industrial location. In addition to initiatives in individual sectors towards GX, which were already indicated in the traditional GX promotion strategy, they are formulating policies with an emphasis on industrial policy. In addition, in efforts toward GX in specific sectors, it is indicated that investment promotion measures should be advanced based on not only the "Sector-specific Investment

Strategies" but also the Plan for Global Warming Countermeasures and the 7th Strategic Energy Plan.

Therefore, it can be said that the Government of Japan has a strategy for the transition for climate change mitigation.

2. Is the use of the "transition" label in financing intended to contribute to realizing a corporate strategy to transition to a business model that allows issuers to effectively address climate change-related risks and to contribute to achieving the goals of the Paris Agreement?

Japan's government-led GX aims to transform the economy, society, and industrial structure, which have centered on fossil fuels since the Industrial Revolution, to one focused on clean energy. It seeks to achieve a simultaneous stable energy supply, economic growth, and reduced emissions in order to reform the entire socioeconomic system.

The Japanese government intends to utilize funding raised through "transition"-labeled bonds and use these as a source for concrete support programs, thereby demonstrating to domestic businesses and citizens the significance and direction of GX.

In December 2020, immediately after the first edition of the CTFH was published by ICMA in May 2021, the Government of Japan released the "Basic Guidelines on Climate Transition Finance." This basic guideline is intended to promote efforts toward steady low-carbon energy saving in sectors where emission reductions are difficult, and to accelerate innovation contributing to transitions such as long-term research and development for decarbonization. Additionally, it was formulated with the purpose of popularizing climate transition finance, which is in its nascent stage, and ensuring the credibility when raising funds under the name of transition finance. This will establish the position of transition finance as a means of funding transition, particularly in sectors where emission reductions are difficult, and contribute to realizing Japan's 2050 net zero and the goals of the Paris Agreement through the introduction of more funds.

The basic guidelines are revised in a timely manner, taking into account international movements related to transition finance, and the most recent revision was made in March 2025.

This Framework is formulated in accordance with the CTFH and the same basic guidelines, and aims to contribute to the realization of a strategy to transition to a business model that allows Japan as a whole to contribute to achieving the goals of the Paris Agreement.

3. Is a governance system established to ensure the effectiveness of the transition strategy?

As previously mentioned, the Government of Japan recruits relevant ministries and agencies, external experts, and specialists required for GX, and after necessary discussions, the transition strategy is ultimately formulated at the GX Implementation Council chaired by the Prime Minister. Progress is then reported to this conference, where revisions are made as necessary.

Therefore, JCR evaluates that the Government of Japan is establishing a system to steadily implement its transition strategy.

Element 2. Business model environmental materiality

Japan ranks seventh in the world in terms of GHG emissions, and in order to keep the global temperature rise at the level set by the Paris Agreement, it is expected to take the lead in reducing them while leading the international community. Considering that the introduction of carbon pricing will begin domestically and internationally in the future, for many manufacturing industries with international competitiveness to maintain good performance while achieving a carbon-neutral society, it is urgent to implement various decarbonization measures and structural transformations for each industry type as stipulated in the GX Promotion Act. In this context, in June 2023, the Government of Japan presented the "Grand Design and Action Plan for a New Form of Capitalism," and the revised version of the above plan was issued in June 2024 and June 2025. Within this, it is anticipated that in Japan, GX (Green Transformation) will contribute to enhancing the industrial competitiveness of the country by maximizing the utilization of expertise in fields where Japanese companies have technical strengths in decarbonization-related technology research, thus accelerating the nation's transition to decarbonization.

Based on the above, JCR evaluates that the Government of Japan's efforts toward achieving carbon neutrality, known as GX initiatives, are one of the most crucial challenges for Japan.

Element 3. Climate transition strategy and targets to be science-based

Does the transition roadmap meet the followings?

- **It is quantitatively measurable and the target covers Scope 1 and 2 (It is recommended that the target of Scope 3 be established to the extent feasible)**

As indicated in the Plan for Global Warming Countermeasures, Japan's GHG emissions reduction target is consistent with the goal set by the scientifically based objectives agreed upon by the international community in the Paris Agreement (keep the global temperature rise well below 2 °C and to pursue efforts to limit the temperature increase even further to 1.5 °C). In Japan, since the government does not adopt the concept of Scope 1, Scope 2, and Scope 3 emissions, this section has been considered by JCR in accordance with the definitions established by the PCAF¹⁰. If the direct business activities of the country are defined as Scope 1 and Scope 2, the target setting and specific measures are planned in the National Government Action Plan. As for the emissions for the whole of Japan, which fall under Scope 3, the total emissions by source or sector are disclosed in the Plan for Global Warming Countermeasures as mentioned above. Moreover, the targets and measures for FY2030, FY2035, and FY2040 have been meticulously set based on specific technical examinations.

Therefore, JCR evaluates the Government of Japan's plan as having an appropriately covered scope, and high transparency in both disclosed achievements and targets.

- **Alignment with generally recognized science-based target setting**

Japan's GHG emissions reduction target was set assuming alignment with the Paris Agreement in 2021. Furthermore, the sectoral technology roadmaps, particularly for high-emission industries, are formulated to align as much as possible with the IEA¹¹'s NZE scenario¹² and SDS scenario¹³, provided there is a current or future technical basis for such alignment, with the achievement of the respective targets as a premise.

Moreover, the Government of Japan has set a target (-2.7% reduction per year *JCR conversion) that aligns with the goal of limiting global warming to 1.5°C as indicated in the IPCC¹⁴ 1.5°C Special Report¹⁵ on Global Warming of 1.5°C (approximately 45% reduction from the 2010 level by 2030; -2.25% reduction per year), which JCR evaluates as aligned with the scientifically-based goal setting under the Paris Agreement aiming for 1.5°C¹⁶.

For reference, the relative ambition levels of targets compared to other countries are shown in the following figure.

¹⁰ MOE "Practical Decarbonization Guidance for Financial Institutions Based on Portfolio Carbon Analysis"
<https://www.env.go.jp/content/000125696.pdf>

¹¹ International Energy Agency (IEA)

¹² Net Zero Emissions by 2050 Scenario by IEA

¹³ Sustainable Development Scenario, which is the path to fully achieve the sustainable development goals by the IEA

¹⁴ Intergovernmental Panel on Climate Change (IPCC)

¹⁵ IPCC "Global Warming of 1.5°C An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty
https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_Full_Report_HR.pdf

¹⁶ The IPCC Special Report on Impacts of Global Warming of 1.5°C was updated in the IPCC's 6th Assessment Report (AR6). The target of 1.5 °C therein will reduce the CO2 emissions by roughly 36% to 69% from the FY2019 level by FY2030 (Reduction Rate: 3.3% to 3.6% per year)

Country	Emission Reduction Target by 2030 (Base Year 2013)
United Kingdom	-54.6%
Switzerland	-49.4%
Brazil	-48.7%
Japan	-46.0%
United States	-45.6%
Saudi Arabia	-43.3%
EU27	-41.6%
Canada	-40.4%
South Africa	-33.3%
South Korea	-23.7%
Ukraine	-23.0%
Australia	-18.4%
Mexico	-0.4%
Thailand	7.0%
Kazakhstan	8.6%
China	14.1%
Malaysia	23.1%
Russia	51.8%
India	99.2%
Indonesia	131.0%
Pakistan	234.6%

Figure 1: GHG emission reduction rate target for FY2030 (comparison when each country's target is replaced with figures based on the 2013 standard)¹⁷

- **It shall be Publicly disclosed (including Interim Targets)**

The Government of Japan's goal of achieving carbon neutrality by 2050 is clearly stated in the Act on Promotion of Global Warming Countermeasures. Additionally, interim targets have been declared in the Plan for Global Warming Countermeasures, aiming to reduce its GHG emissions by 46% in FY2030, by 60% in FY2035, and by 73% in FY2040, respectively, from its FY2013 levels. Moreover, specific targets for FY2030 and FY2040, categorized by emission sources, are disclosed in the same plan, ensuring high transparency.

- **It shall be Supported by Independent Assurance or Verification**

Regarding GHG emissions, due to their unique nature, they have not received third-party certification or verification that general companies would undergo. However, given the fact that the Global Warming Prevention Headquarters, where the Prime Minister serves as chairperson and all the cabinet members participate, approves the status of the progress after the deliberation of relevant councils on an annual basis, the process is well-managed by internal and external experts. Accordingly, JCR considers that the status of the progress of the plan is virtually monitored by a third party.

From the above, JCR evaluates that the Government of Japan's efforts toward achieving net zero by 2050 are based on scientific evidence and meet the necessary requirements in Element 3.

¹⁷ Source: Materials of a joint meeting for a clean energy strategy "Materialize political initiatives for realizing GX"

Element 4. Implementation transparency

The Government of Japan, in its GX Promotion Strategy and GX2040 Vision, has decided on a total investment of 150 trillion yen by both the public and private sectors over the decade. Furthermore, the specific breakdown has been announced as follows according to the energy supply sector and the demand sector.

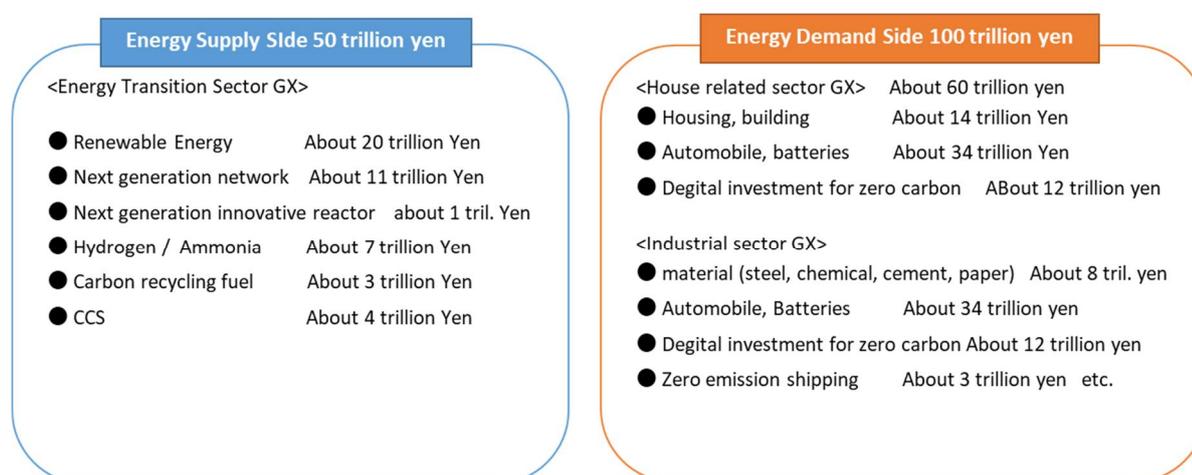


Figure 2: Breakdown of public/private investments for 10 years¹⁸

Out of the total investment of 150 trillion yen, 20 trillion yen is expected to be executed as an investment promotion measure through GX Economy Transition Bonds. Regarding this investment promotion measure, to enhance predictability for companies and strongly stimulate GX investment, the Government of Japan is compiling a "Sector-Specific Investment Strategies¹⁹" as a means to present concrete investment promotion measures and a "Five-Year Action Plan" for the next ten years in the FY2023. Incidentally, approximately 1.6 trillion yen of Climate Transition Bonds (referred to as GX Economy Transition Bonds, or "CT Bonds" hereafter) have already been issued in FY2023, and about 1.4 trillion yen is issued in FY2024. Furthermore, at the GX Implementation Council held in May 2024, the breakdown of the government's investment plans for the next 3-10 years as part of the main implementation status of the GX Investment Support Measures was presented as follows, and at the GX Implementation Council held in December 2024, the budget amount for each item was indicated.

¹⁸ Sources: Materials for the GX Implementation Council: Toward the achievement of GX in Japan

¹⁹ December 22, 2023 "Sector-specific Investment Strategies" https://www.meti.go.jp/english/press/2023/1222_002.html

Innovative technology development	<u>Already allocated</u> <u>1 trillion yen</u>	<ul style="list-style-type: none"> Representative examples from the Green Innovation Fund, which supports innovative technology development with high decarbonization effects: <ol style="list-style-type: none"> Promoting development of next-generation solar cells (perovskite), to be launched on the market in 2025 Demonstration equipment for hydrogen reduction steelmaking to be introduced in 2026 Successfully developed ammonia combustion, to be commercialized in Malaysia in 2026 (MOU signed), etc. *Support for R&D of ammonia ships (plus support for production equipment for zero-emission ships, etc.) <ul style="list-style-type: none"> Support for basic research and human resource development at universities, etc. through the Green Technologies for Excellence (GteX) Program Support for development of semiconductor technology (photonics-electronics fusion) to drastically reduce electricity consumption, etc.
Structural transformation of high-emission industries	<u>1.3 trillion yen or more</u> <u>(for 10 years)</u>	<ul style="list-style-type: none"> "Innovative electric furnaces" that cut emissions by more than half, chemical recycling, biorefineries, CCUS, etc.
Household GX	<u>2 trillion yen or more</u> <u>(for 3 years)</u>	<ul style="list-style-type: none"> Renovating homes to insulated windows (strengthening the insulation of windows, which account for 70% of heat entering and leaving homes) Introduction of high-efficiency water heaters (heat pumps, etc.) Support for the introduction of electric vehicles/storage batteries, etc.
Hydrogen, etc.	<u>3 trillion yen or more</u> <u>(for 15 years)</u>	<ul style="list-style-type: none"> Support measures focusing on the price difference of hydrogen, etc.
Next-generation renewable energy	<u>1 trillion yen or more</u> <u>(for 10 years)</u>	<p>In addition to renewable energy introduction support measures (FIT system) on the scale of several trillion yen per year,</p> <ul style="list-style-type: none"> Support for building supply chains for perovskite, floating offshore wind, water electrolysis equipment, etc., and consideration of support for the introduction of perovskite (in addition to the GI fund, 1 trillion yen will be provided over 10 years)
Small and medium-sized enterprises, startups, etc.	<u>1 trillion yen or more</u> <u>(for 3-5 years)</u>	<ul style="list-style-type: none"> Support for energy conservation for small and medium-sized enterprises, etc. (700 billion yen will be provided over 3 years) Support for GX startups (200 billion yen will be provided over 5 years) etc.
Tax measures		- Establish new tax credits based on the production and sales volume of green steel, green chemicals, SAF, EVs, etc.

Figure 3: Implementation status of GX investment support measures²⁰

Regarding the investment details for each fiscal year, as the government's budget is executed on an annual basis, they plan to announce it after the annual budget is passed.

Based on the above, JCR evaluates the Government of Japan's investment plan as having high transparency, as the government discloses information such as planned government expenditures, the scale of public-private investment expected to be promoted by these expenditures, and the 10-year roadmap.

The Ministry of Economy, Trade and Industry in Japan has pointed out in its sectoral technology roadmaps that there are multiple areas requiring business transformation and employment shifts that accompany the execution of transition strategies. Since most of the expenditures from GX

²⁰ Source: "Toward Accelerating Japan's GX," a material for GX Implementation Council https://www.cas.go.jp/jp/seisaku/gx_jikkou_kaigi/dai11/siryou1.pdf

Economy Transition Bonds are directed towards research and development or subsidy programs for multiple companies, they do not inherently require the direct consideration of a just transition as business transition strategies do. On the other hand, the Government of Japan recognizes that achieving a fair transition is an important issue, considering Japan's characteristics of having a high proportion of manufacturing industries and low labor mobility. Based on the above, the GX2040 Vision includes additions regarding a "just transition," detailing support for the facilitation of labor mobility to growth sectors, transfer support, and reskilling assistance for career upgrades of current employees. It also describes efforts to support the acquisition of new skills necessary to respond to the advancement of supply chains through the use of DX such as robotics and AI, taking into account ensuring that workers can continue to thrive in an advanced supply chain as the transition to a GX industrial structure occurs.

Regarding the possibility of being locked into fossil fuels, both the sectoral technology roadmaps and the GX2040 Vision formulated by the Government of Japan are designed to achieve net zero by 2050. They are aimed at achieving carbon neutrality through next-generation technological innovation rather than relying heavily on carbon credits, thus assessing the risk as low. In addition, it is a prerequisite that the target projects for the support measures funded by these bonds are aligned with Japan's transition strategy, such as sectoral technology roadmaps, and it is evaluated that the risk of locking in fossil fuels is low.

Regarding the perspective of DNSH (Do No Significant Harm), it is considered that the significant use of this Framework's funds allocated towards research and development, and the establishment of clear criteria in the grant program for benchmarking subsidies, work to avoid serious negative impacts on the environment.

Accordingly, JCR has evaluated that this Framework satisfies the four elements required in the Climate Transition Finance Handbook, etc.

2. Use of Proceeds

This bond's use of proceeds comprises subsidies for research and development and capital investment, as well as equity contributions to the GX Acceleration Agency, for which budgetary funds were secured by the Government of Japan in FY2023 and FY2024 (with some portions from FY 2022). These uses of proceeds all target projects that significantly contribute to reducing Japan's GHG emissions and are included in the sector-specific investment strategies formulated based on the GX Promotion Strategy.

JCR confirmed that the proceeds from the Bonds were allocated to projects that JCR had evaluated as appropriate at the time of the initial evaluation as follows:

Table 1: Use of proceeds of the Bonds²¹

	Budget Year	New/Continuation	Allocated Project	Green Category
(1) R&D	FY2024 Initial	Continuation	1. Development project for high-temperature gas-cooled reactor demonstration reactor	Low-carbon and decarbonized energy
	FY2024 Initial	Continuation	2. Development project for fast reactor demonstration reactor	Low-carbon and decarbonized energy
	FY2024 Initial	New	3. Deep tech startup support program in the green transformation field	Cross-sectoral
	FY2023 Suppl.	Continuation	4. Research and development project for enhancing the post-5G information and communication system infrastructure	Energy efficiency
(2) Support for Capital Investment	FY2024 Initial	New	5. Support for energy/manufacturing process conversion for hard-to-abate industries	Energy efficiency, Circular economy adapted products, production technologies and processes
	FY2023 Suppl. FY2024 Initial	Continuation	6. Support Project for Strengthening the Manufacturing Supply Chain of Batteries	Energy efficiency, Renewable energy, Clean transportation
	FY2024 Initial	New	7. Support for establishing production and supply system of sustainable aviation fuel (SAF)	Clean Transportation
	FY2024 Initial	New	8. Support for enhancing the resilience and autonomy of circular economy systems through industry-government-academia collaboration	Pollution prevention and control, Circular economy adapted products, production technologies and processes
	FY2024 Initial	New	9. Support for building GX supply chains	Renewable energy
	FY2024 Initial	New	10. Investment promotion for advanced resource circulation	Pollution prevention and control,

²¹ Prepared by JCR from materials provided by the Ministry of Economy, Trade and Industry. Regarding the budget year, "FY2022 Suppl." indicates the supplementary budget projects for FY2022, "FY2023 Suppl." indicates the supplementary budget projects for FY2023, and "FY2024 Initial" indicates the initial budget projects for FY2024 (the same applied to the following).

				Circular economy adapted products, production technologies and processes
	FY2024 Initial	New	11. Promotion of the construction of zero-emission ships etc.	Clean transportation
	FY2023 Suppl.	Continuation	12. Support for strengthening domestic production capacity of power semiconductors contributing to energy savings	Energy efficiency, Clean transportation, Renewable energy
	FY2022 Suppl. FY2023 Suppl.	Continuation	13. Support project costs for promoting energy efficiency investment and demand structure transformation	Energy efficiency
(3) Introduction support	FY2024 Initial	New	14. Installation support for electricity storage systems such as grid-scale batteries to expand renewable energy usage	Energy efficiency, Renewable energy
	FY2024 Initial	Continuation	15. Grant for decarbonization transition acceleration for specific regions (microgrid-related projects utilizing privately-owned distribution lines and other related initiatives)	Renewable energy, Energy efficiency
	FY2023 Suppl.	New	16. Subsidy for promoting energy savings in households through installing high-efficiency water heaters	Energy efficiency
	FY2023 Suppl.	Continuation	17. Subsidy for promoting the introduction of clean energy vehicles	Clean transportation
	FY2023 Suppl.	Continuation	18. Support project for accelerating energy conservation and CO ₂ reduction in the household sector through insulating windows	Energy efficiency
	FY2023 Suppl.	New	19. Accelerating decarbonizing renovations for buildings	Energy efficiency
	FY2023 Suppl.	Continuation	20. Promotion project for the electrification of commercial vehicles	Clean transportation
	FY2024 Initial	New	21. Support focused on the price gap to build supply chains for hydrogen and its derivatives	Circular economy adapted products, production technologies and processes
(4) Capital Contribution to the Agency	FY2024 Initial	New	22. Capital for GX Acceleration Agency	Cross-sectoral

3. Selection Criteria and Process for the Use of Proceeds

At the time of the initial evaluation, JCR concluded that the selection criteria for the use of proceeds and the process were appropriate. As a result of conducting interviews with the Government of Japan for this review, JCR confirmed that the selection criteria were not changed from the assumption at the time of the initial evaluation, and that the selection procedure was carried out according to the assumed process.

4. Management of Proceeds

At the time of the initial evaluation, JCR evaluated the management of proceeds as reasonable. And JCR also confirmed that JPY 1,235.8 billion out of the proceeds raised through the Bonds was allocated in accordance with the established procedures set forth in the Framework. Unallocated proceeds are intended to be allocated to projects that were evaluated as eligible at the time of the initial evaluation, and are expected to be fully allocated by the end of the FY2025. JCR believes that the management of the unallocated proceeds is appropriate because they will be allocated to eligible projects as soon as possible.

5. Reporting

5-1. Reporting on the Status of Allocation of Proceeds

The total amount of the proceeds raised through the Bonds was JPY 1,392.0 billion, of which JPY 1,235.8 billion was allocated to each eligible business as follows. The Government of Japan has disclosed this on its website, as well as plans to allocate unallocated proceeds. JCR concluded that the content of the disclosure met the requirements set forth in the Framework and was appropriate.

Table 2: Proceeds Allocated to Eligible Projects (as of the end of November 2025) ²²

	Budget Year	New/Continuation	Allocated Project	Allocated Amount (billion yen)
(1) R&D	FY2024 Initial	Continuation	1. Development project for high-temperature gas-cooled reactor demonstration reactor	18.3
	FY2024 Initial	Continuation	2. Development project for fast reactor demonstration reactor	18.9
	FY2024 Initial	New	3. Deep tech startup support program in the green transformation field	41.0
	FY2023 Suppl.	Continuation	4. Research and development project for enhancing the post-5G information and communication system infrastructure	28.1
				106.3
(2) Support for Capital Investment	FY2024 Initial	New	5. Support for energy/manufacturing process conversion for hard-to-abate industries	0.4
	FY2023 Suppl. FY2024 Initial	Continuation	6. Support Project for Strengthening the Manufacturing Supply Chain of Batteries	265.8 230.0
	FY2024 Initial	New	7. Support for establishing production and supply system of sustainable aviation fuel (SAF)	0.1

²² Prepared by JCR from materials provided by the Ministry of Economy, Trade and Industry

	FY2024 Initial	New	8.	Support for enhancing the resilience and autonomy of circular economy systems through industry-government-academia collaboration	0.1
	FY2024 Initial	New	9.	Support for building GX supply chains	0.5
	FY2024 Initial	New	10.	Investment promotion for advanced resource circulation	0.01
	FY2024 Initial	New	11.	Promotion of the construction of zero-emission ships etc.	0.8
	FY2023 Suppl.	Continuation	12.	Support for strengthening domestic production capacity of power semiconductors contributing to energy savings	280.6
	FY2022 Suppl. FY2023 Suppl.	Continuation	13.	Support project costs for promoting energy efficiency investment and demand structure transformation ²³	34.4
					812.7
(3) Introduction support	FY2024 Initial	New	14.	Installation support for electricity storage systems such as grid-scale batteries to expand renewable energy usage	1.8
	FY2024 Initial	Continuation	15.	Grant for decarbonization transition acceleration for specific regions (microgrid-related projects utilizing privately-owned distribution lines and other related initiatives)	0.05
	FY2023 Suppl.	New	16.	Subsidy for promoting energy savings in households through installing high-efficiency water heaters	56.0
	FY2023 Suppl.	Continuation	17.	Subsidy for promoting the introduction of clean energy vehicles	22.2
	FY2023 Suppl.	Continuation	18.	Support project for accelerating energy conservation and CO ₂ reduction in the household sector through insulating windows	98.6
	FY2023 Suppl.	New	19.	Accelerating decarbonizing renovations for buildings	0.6
	FY2023 Suppl.	Continuation	20.	Promotion project for the electrification of commercial vehicles	17.4
	FY2024 Initial	New	21.	Support focused on the price gap to build supply chains for hydrogen and its derivatives	0.1
					196.8
(4) Capital Contribution to the Agency	FY2024 Initial	New	22.	Capital for GX Acceleration Agency	120.0
					120.0
Total					1,235.8^{*1}
Total issuance amount of the JCTBs issued in FY2024 (cash proceeds)					1,392.0
Amount of unallocated proceeds (cash proceeds - amount of proceeds allocated)					156.2^{*2}

*1 The allocated amounts to the projects are inconsistent with the total amount as the values are rounded off to one decimal place.

²³ The subsidy coverage of the " Support project costs for promoting energy efficiency investment and demand structure transformation " includes support for energy conservation initiatives related to equipment using fossil fuels (LNG, petroleum, coal, etc.). JCR has confirmed through disclosed information and interviews with the Japanese government that this subsidy constitutes a project aimed at achieving Japan's greenhouse gas emission reduction targets for 2030. Furthermore, the Japanese government states that there is no assumption of long-term use of fossil fuels in this project that could affect the achievement of the 2050 carbon neutrality target. JCR has confirmed that the FY2023 supplementary budget stipulates, as a grant condition, the requirement to consider alternatives to low-carbon fuels such as hydrogen, ammonia, and synthetic methane, thereby reducing carbon lock-in risk. Furthermore, as with other transition projects, it is considered necessary to conduct periodic reviews of the aforementioned matters to ensure that carbon lock-in risks do not materialize.

*2 The unallocated amount is scheduled to be fully allocated either through a carry forward to FY2025 or to continuing projects under the FY2024 supplementary budget.

5-2. Impact Reporting

As stipulated in this framework, reporting on the impacts of the eligible projects is scheduled to be conducted no later than the end of FY2026 (the fiscal year following the year after the bond issuance).

Review Results (Conclusion)

Green 1(T)

After the review, JCR evaluated the Bonds at "gt1" for "Green/Transition Evaluation (Use of Proceeds)" and "m1" for "Management, Operation and Transparency Evaluation," and "Green 1(T)" for the overall "JCR Climate Transition Bonds Evaluation" based on JCR's Green Finance Evaluation Methodology. As a result, JCR concluded that the Bonds met the standards for the items required in the Green Bond Principles, the Green Bond Guidelines, the Climate Transition Finance Handbook and the Basic Guidelines for Climate Transition Finance.

		Management, Operation, and Transparency Evaluation				
		m1	m2	m3	m4	m5
Green and Transition Evaluation	gt1	Green 1(T)	Green 2(T)	Green 3(T)	Green 4(T)	Green 5(T)
	gt2	Green 2(T)	Green 2(T)	Green 3(T)	Green 4(T)	Green 5(T)
	gt3	Green 3(T)	Green 3(T)	Green 4(T)	Green 5(T)	Not qualified
	gt4	Green 4(T)	Green 4(T)	Green 5(T)	Not qualified	Not qualified
	gt5	Green 5(T)	Green 5(T)	Not qualified	Not qualified	Not qualified

(Responsible analysts for this evaluation) Kosuke Kajiwara, Tomohiko Inamura, Takuto Toda

Important explanations of this Evaluation

1. Assumptions, Significance and Limitations of JCR Climate Transition Bond Evaluation

JCR Climate Transition Bond Evaluation, which is determined and provided by Japan Credit Rating Agency, Ltd. (JCR), covers the policies set out in the Climate Transition Finance Framework, and expresses JCR's comprehensive opinion at this time regarding the appropriateness of the Green/Transition Project as defined by JCR and the extent of management, operation and transparency initiatives related to the use of funds and other matters. Therefore, JCR Climate Transition Finance Framework Evaluation is not intended to evaluate the effects of specific environmental improvements and the management, operation and transparency of individual bonds and borrowings, etc. to be implemented based on these policies. In the event an individual bond or individual borrowing based on this Framework is subject to a green/transition finance evaluation, a separate evaluation is needed. JCR Climate Transition Finance Framework Evaluation does not prove the environmental improvement effects of individual bonds or borrowings implemented under this Framework, and does not assume responsibility for their environmental improvement effects. JCR confirms the environmental improvement effects of funds procured under the Climate Transition Finance Framework measured quantitatively and qualitatively by the issuer/borrower or by a third party nominated by the issuer/borrower, but in principle it does not directly measure such effects.

2. Method used to conduct this evaluation

The methodologies used in this assessment are described in "JCR Green Finance Evaluation" on the "Sustainable Finance ESG" section of the JCR website (<https://www.jcr.co.jp/en>).

3. Relationship with Acts Concerning Credit Rating Business

JCR Climate Transition Finance Framework Evaluation is determined and provided by JCR as a related business, which is different from its activities related to the credit rating business.

4. Relationship with Credit Ratings

The Evaluation is different from the Credit Rating and does not assure to provide or browse a predetermined credit rating.

5. Third-Party Evaluation of JCR Climate Transition Finance Framework Evaluation

There are no capital and/or personnel relationships that may result in a conflict of interests between the subject of this evaluation and JCR.

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■ Glossary

JCR Climate Transition Finance Framework Evaluation: This evaluates the extent to which the funds procured through Green/Transition Finance are appropriated for green/transition projects as defined by JCR and the degree to which the management, operation and transparency of the Green/Transition Finance are ensured. Evaluations based on a 5-point scale are given from top to bottom using the Green 1(T), Green 2(T), Green 3(T), Green 4(T), and Green 5(T) symbols.

■ Status of Registration as an External Evaluator of Sustainability Finance

- Registered as an External Reviewer of Green Bonds by the Ministry of the Environment
- ICMA (registered as an observer with the Institute of International Capital Markets)

■ Status of registration as a credit rating agency, etc.

- Credit Rating Agency: the Commissioner of the Financial Services Agency (Rating) No.1
- EU Certified Credit Rating Agency
- NRSRO: JCR has registered with the following four of the five credit rating classes of the U.S. Securities and Exchange Commission's Nationally Recognized Statistical Rating Organization (NRSRO): (1) financial institutions, broker-dealers, (2) insurance companies, (3) general business corporations and (4) governments and municipalities. If the disclosure is subject to Section 17g-7 (a) of the Securities and Exchange Commission Rule, such disclosures are attached to the news releases appearing on the JCR website (<https://www.jcr.co.jp/en/>).

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