

JCR Green Bond Framework Evaluation  
By Japan Credit Rating Agency, Ltd.

Japan Credit Rating Agency, Ltd. (JCR) announces the following Green Bond Framework Evaluation Results.

## JCR Assigns Green 1 (F) to the Green Bond Framework of MinebeaMitsumi Inc.

Issuer : MinebeaMitsumi Inc. (security code: 6479)  
Subject : Green Bond Framework of MinebeaMitsumi Inc.

### <Green Bond Framework Evaluation Results>

Overall Evaluation	Green 1(F)
Greenness Evaluation (Use of proceeds)	g1(F)
Management, Operation, and Transparency Evaluation	m1(F)

## Chapter 1: Evaluation Overview

### 1. Overview of MinebeaMitsumi Inc.

MinebeaMitsumi Inc. (MinebeaMitsumi) is a comprehensive precision parts manufacturer founded in 1951 that develops a wide range of products globally. In 2017, MITSUMI ELECTRIC CO., LTD., a major electronic components manufacturer, became a wholly owned subsidiary and changed its name from Minebea to MinebeaMitsumi. Leveraging its core technologies, including ultra-precision machining technologies and mass production technologies, the Company is involved in eight core businesses and three sub-core businesses, and is diversifying around niche fields. MinebeaMitsumi calls itself an “INTEGRATION” manufacturer of precision components, which means “combining” rather than “simple gathering” of its proprietary technologies to evolve its core business and to create synergies in various fields through the INTEGRATION of its advanced product.

In the mainstay machined products business, it holds a majority of the global market for miniature ball bearings and pivot assemblies for HDDs, and also holds a high share of the market for rod ends and fasteners for aircraft. The Electronic Equipment business handles motors, LED backlights, measuring equipment, and other products. The MITSUMI business focuses on optical devices for smartphones, mechanical components for game consoles, and analog semiconductors. The U-Shin business will be centered on the automotive parts manufacturer U-Shin, which was acquired in 2019. Products defined as core businesses, such as miniature ball bearings, motors, and analog

semiconductors, are not easily replaced even with technological innovations, and the earnings base is stable. Currently, in addition to domestic production and sales of products, the Company is expanding its business globally in Asia, U.S., and European countries, including China, Thailand, the Philippines, Malaysia, Cambodia, South Korea, and Singapore.

## 2. MinebeaMitsumi's sustainability strategy

MinebeaMitsumi's management philosophy is "To contribute to realization of a sustainable, eco-friendly and prosperous society by providing better products, at a faster speed, in larger numbers, at a lower cost and by smarter means." They have also set "Contributing to solutions to environmental issues" as a key management issue (materiality). Based on this philosophy, the Company has set "QCDESS™: Quality, Cost, Delivery, Eco/Efficiency, Service, Speed" as the foundation for its strategic initiatives. By placing not only quality, price, delivery time, and service, but also the development, manufacture, and sale of products thoroughly considering the environment and efficiency at the center of the management strategy, it hopes to contribute to the improvement of the global environment through its corporate activities themselves. Furthermore, as environmental targets, the Company has set up a 30% increase (approximately 2.3 million metric t-CO<sub>2</sub>, target for fiscal 2030) in the volume of CO<sub>2</sub> emissions reduced by its products compared to fiscal 2020, a 90% or more sales ratio of Green Products (target for fiscal 2028), and a 30% reduction (target for fiscal 2030) in its own CO<sub>2</sub> emissions compared to fiscal 2020.

At MinebeaMitsumi, the Head of Sustainability Management Division takes the lead in promoting efforts related to sustainability, and the Group Environmental Management Office belonging to the Head of Sustainability Management Division conducts calculations of CO<sub>2</sub> emission reductions, etc. In addition, Carbon Neutral Steering Committee (CNSC), the Environmental Management Committee, and the Risk Management Committee have been established as committees that do not belong to the department. MinebeaMitsumi also acknowledges the importance of climate-related financial disclosure and endorses the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in 2020. Furthermore, the Company has received external evaluations of "A-" in both "CDP Climate Change 2021" and "CDP Water Security 2021." The Company's internal environmental management is certified by an external ISO 14001 audit. Therefore, JCR has evaluated that internal and external experts with expert knowledge are involved in sustainability initiatives as an organization.

## 3. About the Green Bond Framework

Among the measures that will help MinebeaMitsumi achieve its environmental targets, the Green Bond Framework (the Framework) was established with the purpose of appropriating funds for investment and R&D expenses to produce power-saving high quality bearings and ultra-high performance bearings, investment and R&D expenses to produce bearings for EV main motors, and the cost of capital investment or power purchase to convert electricity used in the Company's business activities to clean energy in order to promote the Company's reduction of CO<sub>2</sub> emissions in order to achieve carbon neutrality. JCR recognizes that MinebeaMitsumi's eligibility criteria set out in the Framework are all significant contributions to global and social sustainability. JCR also evaluates that the project selection process, the fund management system, and the post-issuance reporting system have been properly established and are highly transparent.

As a result, based on JCR Green Finance Evaluation Methodology, JCR assigns "g1 (F)" for "Greenness Evaluation (Use of Proceeds)" and "m1 (F)" for "Management, Operation and Transparency Evaluation." Consequently, JCR assigns "Green1 (F)" for overall "JCR Green Bond Framework Evaluation" to the Framework.

The Framework meets the standards for the items required in the Green Bond Principles<sup>1</sup>, the Ministry of the Environment's Green Bond Guidelines<sup>2</sup>.

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<sup>1</sup> ICMA (International Capital Market Association) Green Bond Principles 2021  
<https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf>

<sup>2</sup> Ministry of the Environment's Green Bond Guidelines 2020 [https://www.env.go.jp/policy/guidelines\\_set\\_version\\_with%20cover.pdf](https://www.env.go.jp/policy/guidelines_set_version_with%20cover.pdf)

## Chapter 2: Current Status of the Project on Each Evaluation Factor and JCR's Evaluation

### Evaluation Phase 1: Greenness Evaluation

Based on the current status described below and JCR's evaluation of the subject, JCR evaluated 100% of the use of proceeds was green project, and assigned “g1 (F)”, the highest rank for Phase 1: Greenness Evaluation.

### (1) JCR's Key Consideration in This Factor

In this section, JCR first confirms whether the use of proceeds set out in this Framework is used for green projects that have a clear environmental improvement effect. Next, in cases where the use of proceeds is expected to have a negative impact on the environment, JCR confirms that the impact is examined sufficiently by an internal specialist department or an external third party and whether necessary measures for avoidance and mitigation have been taken. Finally, JCR confirms the alignment with the Sustainable Development Goals (SDGs).

### (2) Current Status of Evaluation Targets and JCR's Evaluation

<The Framework for Use of Proceeds>

#### a. Environmental Improvement Effects of the Project

MinebeaMitsumi has set the following uses of funds in the Framework. An amount equal to the total issuance of Green Bonds issued by the Company is expected to be used for new or existing eligible projects as new financing or refinancing. In the case of appropriations for existing projects, it is assumed that they were implemented within two years from the issuance of green bonds.

Business Categories	ICMA GBP Categories	Eligible Projects
<b>A: Production and Research and Development of ball-bearings</b>	<ul style="list-style-type: none"> <li>Eco-efficient and / or circular economy adapted products, production technologies and processes</li> </ul>	Capital investment for production facilities of following products and for research and development <ul style="list-style-type: none"> <li>■ Power-saving high quality bearings</li> <li>■ Ultra-high performance bearings &lt;Expected final usage&gt;               <ul style="list-style-type: none"> <li>· Fan motors used in data centers</li> <li>· High-end home appliances (e.g. Air conditioners)</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>Clean Transportation</li> </ul>	Capital investment for production facilities of following products and for research and development <ul style="list-style-type: none"> <li>■ Bearings for main motors of EVs &lt;Expected final usage&gt;               <ul style="list-style-type: none"> <li>· xEV</li> </ul> </li> </ul>
<b>B: Procurement of decarbonized power sources</b>	<ul style="list-style-type: none"> <li>Renewable Energy</li> </ul>	Capital investment to transfer to clean energy to be used in the Company's business activities and to purchase renewable energy <ul style="list-style-type: none"> <li>■ Introduction, operation and maintenance of solar energy and</li> </ul>

		other clean energy to the Company's facilities ■ Purchasing renewable energy
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(Source: Prepared by JCR from MinebeaMitsumi Green Bond Framework)

<JCR's Evaluation for the Framework>

**Classification A-1: Production and Research and Development of ball-bearings ; Power-saving high quality bearings and ultra-high performance bearings**

Classification A-1 shows investment and R&D expenses to produce power-saving high quality bearings and ultra-high performance bearings. This use of proceeds falls under the category of “Circular economy adapted products, production technologies and processes and/or certified eco-efficient products” in the Green Bond Principles, and “Projects concerning eco-efficient products, production technologies, and processes” in the Ministry of the Environment's Green Bond Guidelines.

Bearings are used in rotating parts of all kinds of machinery, including automobiles and industrial machinery, and are machine element parts that affect the performance and quality of machinery products. This is an environmentally conscious product that functions exactly and smoothly to rotate the shaft to reduce energy loss and heat generation due to friction. Bearing has contributed to reducing CO<sub>2</sub> in various fields such as transportation equipment and industrial machinery through ultra-precision processing and innovation in materials, and is expected to continue contributing to energy conservation in the future.<sup>34</sup> It also contributes to extending the life of the product, which contributes to resource saving from the viewpoint of reducing waste.

Power-saving high quality bearings and ultra-high performance bearings are covered in this classification. MinebeaMitsumi's miniature ball bearings are the most important components of rotating equipment such as motors, and are used in cooling fan motors for IT-related electronic equipment, including data centers, and in parts for air conditioners. Improved motor energy efficiency due to reduced friction and contributing to the downsizing of end products will help reduce total energy consumption. Especially, with further promotion of DX (Digital Transformation), the effect of energy saving by bearings for data centers is supposed to make a great contribution to the environment, while the power consumption and CO<sub>2</sub> emission of data centers becomes a social problem. Receiving disclosure of the results of the quantitative CO<sub>2</sub> emissions savings estimates using the following formula, JCR verified that they are appropriately calculated.

Figure.1 MinebeaMitsumi's Calculation method to quantify the amount of CO<sub>2</sub> emission reduction contribution

**Calculation formula**

$$\frac{\text{Volume of avoided CO}_2\text{ emissions}}{C_d} = \frac{\text{Reduction in electric power consumption at the time of use of products}}{\Delta W_r \times L} \times \frac{\text{Product lifespan}}{H_{op}} \times \frac{\text{Coefficient for CO}_2\text{ emissions}}{Coef_e} \times \frac{\text{Sales volume in the fiscal year}}{S}$$

$C_d$ : Volume of emissions directly avoided (kg-CO<sub>2</sub>)  
 $\Delta W_r$ : Reduction of electric power consumption in a rated condition (kW)  
 $L$ : Load factor during actual state of operation compared with rated usage conditions  
 $H_{op}$ : Hours of operation (h)  
 $Coef_e$ : Coefficient for CO<sub>2</sub> emissions from power consumption (0.5001 kg-CO<sub>2</sub>/kWh \*average emission coefficient in Japan)  
 $S$ : Sales volume

(Source: MinebeaMitsumi Green Bond Framework)

<sup>3</sup> November 2016 Japan Bearing Manufacturers Association Bearing's Report Contributing to Reducing CO<sub>2</sub> Emissions <https://www.jbia.or.jp/nbi/bearingkouken.pdf>

<sup>4</sup> MinebeaMitsumi Group Integrated Report 2021

[https://www.minebeamitsumi.com/corp/investors/disclosure/integrated\\_report/a2021/\\_icsFiles/afieldfile/2021/10/08/2021\\_integrated\\_report.pdf](https://www.minebeamitsumi.com/corp/investors/disclosure/integrated_report/a2021/_icsFiles/afieldfile/2021/10/08/2021_integrated_report.pdf)

In May 2021, MinebeaMitsumi announced a strategy (QCDESS Strategy) for MinebeaMitsumi's 100th year in 2051 in its Medium-term Business Plans. One of the two pillars contributing to the QCDESS Strategy is "Expand MMI Beyond Zero." "MMI Beyond Zero" means contributing to carbon neutrality of the whole world by improving energy saving efficiency of the Company's products. Specifically, by improving the accuracy of the Company's products, the Company is working to reduce the electricity of products of customers who use them and then customers beyond those customers, thereby contributing to the reduction of CO<sub>2</sub> emissions. MinebeaMitsumi has started the calculation of the reduction contribution amount since fiscal 2020, and announced the environmental target of 30% increase of the reduction contribution amount by fiscal 2030 compared to fiscal 2020.

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**Classification A-2: Production and Research and Development of ball-bearings ; Bearings for main motors of EVs**

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**Classification A-2 refers to investment and R&D expenses to produce bearings for EV main motors, which demand is expected to expand in line with the spread of EVs. This use of proceeds falls under the category of "Clean transportation" in the Green Bond Principles, and "Projects concerning clean transportation" in the Ministry of the Environment's Green Bond Guidelines.**

Regarding bearings for EV main motors, in addition to the functions that contribute to energy saving in the bearings themselves mentioned above, the xEV<sup>5</sup> itself, which is the final product, is a clean transportation device, and the environmental improvement effect is high. MinebeaMitsumi has been conventionally manufacturing small-diameter and miniature ball bearings with an outer diameter of 22mm or less, but bearings for EV main motors require larger outer diameter. Therefore, MinebeaMitsumi is developing its own bearings for EV main engine motors, which can handle up to larger outer diameter, by combining the know-how in high-speed rotation, electrolytic corrosion, and high-temperature durability cultivated in small-diameter and miniature ball bearings with the technologies of group companies. MinebeaMitsumi has already begun implementing the technology, and plans to use the funds mainly to expand production facilities.

Regarding bearings for EV main motors, in The Japan Bearing Industry Association's Carbon Neutral Action Plan Phase II Goals for the Bearing Industry ("Low Carbon Society Implementation Plan" (2030 Targets)), "Development of Bearings Required for Advanced Technologies such as Fuel Cell Vehicles (FCVs) and Electric Vehicles (BEVs)" was cited as the development and introduction of innovative technologies toward carbon neutrality in 2050<sup>6</sup>, which is also consistent with the industry's efforts toward carbon neutrality.

The movement to promote the popularization of EV for the purpose of global warming countermeasures in the major countries of the world has become remarkable. According to the forecast by the International Energy Agency (IEA), global production of EVs (BEV+PHEV) in 2030 is expected to rapidly expand from 3,160,000 units in 2020 to 46,640,000 units in a sustainable scenario, accounting for about 35% of total sales<sup>7</sup>. Demand for bearings used in EV main motor components, which are the core components of EVs, is expected to expand.

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<sup>5</sup> Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry  
<https://www.enecho.meti.go.jp/about/special/johoteikyo/xev.html>

"xEV" is a general term that includes BEV(Battery Electric Vehicle), HEV(Hybrid Electric Vehicle), PHEV/PHV(Plug-in Hybrid Electric Vehicle/Plug-in Hybrid Vehicle), FCEV/FCV(Fuel Cell Electric Vehicle/Fuel Cell Vehicle).

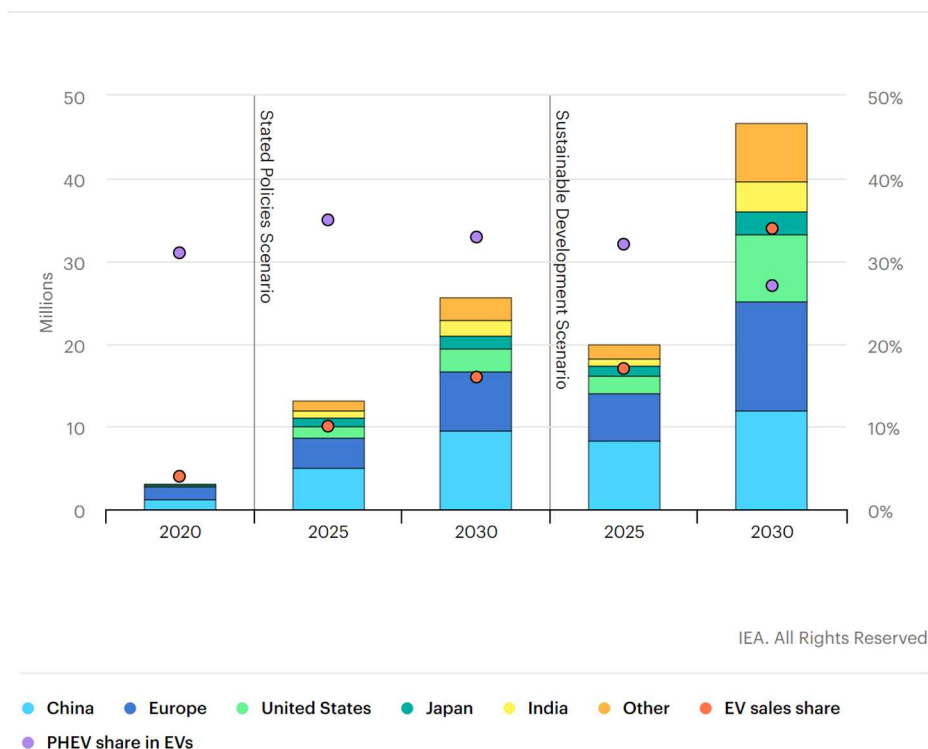
<sup>6</sup> Materials of the Electronics, Electrical and Industrial Machinery Working Group of the Global Environment Subcommittee of the Industrial Technology and Environment Subcommittee of the First Industrial Structure Council in Fiscal 2021 6 Materials of the Japan Bearing Manufacturers Association

[https://www.meti.go.jp/shingikai/sankoshin/sangyo\\_gijutsu/chikyuu\\_kankyo/denshi\\_wg/pdf/2021\\_001\\_06\\_02.pdf](https://www.meti.go.jp/shingikai/sankoshin/sangyo_gijutsu/chikyuu_kankyo/denshi_wg/pdf/2021_001_06_02.pdf)

<sup>7</sup> IEA Global EV car sales scenario 2020-2030 (Updated April 28, 2021)

<https://www.iea.org/data-and-statistics/charts/global-ev-sales-by-scenario-2020-2030>

Figure.2 IEA Global EV (BEV+PHEV) Sales by Scenario, 2020-2030



(Source: IEA Global EV car sales scenario 2020-2030)

### Classification B: Procurement of decarbonized power sources

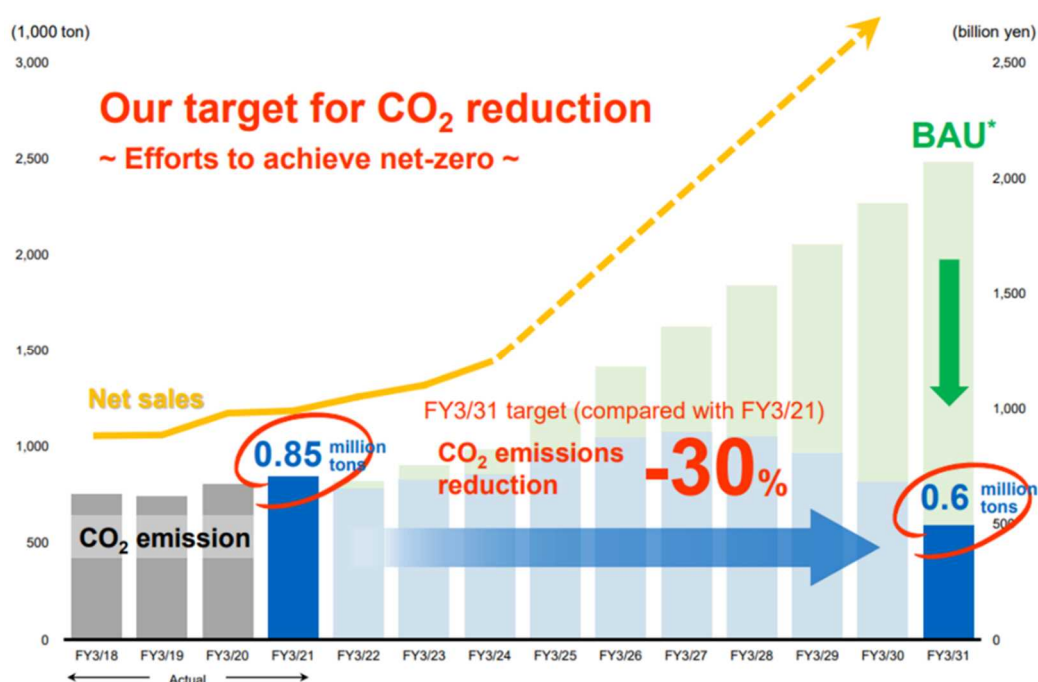
**Classification B is the cost of capital investment or power purchase to convert electricity used in the Company's business activities to clean energy in order to promote the Company's reduction of CO<sub>2</sub> emissions in order to achieve carbon neutrality. This use of proceeds falls under the category of “Renewable energy” in the Green Bond Principles, and “Projects concerning renewable energy” in the Ministry of the Environment's Green Bond Guidelines.**

This is the cost of procuring renewable energy-derived electricity and the cost of installing renewable energy facilities at the Company's own plants in order to reduce CO<sub>2</sub> discharged from the Company's plants. Approximately 90% of MinebeaMitsumi's GHG emissions are attributable to the use of electricity. Substantial reductions in emissions are expected through the conversion of power supply procurement methods to renewable energy or the installation of renewable power generation facilities such as solar power at factories. MinebeaMitsumi has already established mega-solar power generation facilities at two plants located abroad to reduce emissions by 4000 tons of CO<sub>2</sub> equivalent per year. In order to further reduce its own CO<sub>2</sub> emissions through the introduction of renewable energy, it is considering the introduction and procurement of renewable energy.

In May 2021, MinebeaMitsumi announced its strategy (QCDESS Strategy) for MinebeaMitsumi's 100th year in 2051 in its Medium-term Business Plans. One of the two key pillars contributing to the QCDESS Strategy is "Challenges toward Carbon Neutral", and the promotion of its own CO<sub>2</sub> emission reduction is stated. The Company has set a sales target of 2.5 trillion yen for fiscal 2030, and if no special measures are taken, CO<sub>2</sub> emissions are expected to be several times the current level. By utilizing renewable energy such as the

introduction of photovoltaic power generation and promoting energy conservation in the Company, the Company has announced as an environmental target a 30% reduction in CO<sub>2</sub> emissions in fiscal 2030 compared to fiscal 2020. JCR has evaluated this use of funds as a use that contributes to the realization of this reduction target.

Figure 3. MinebeaMitsumi's Challenges toward Carbon Neutrality



\*Business as usual (CO<sub>2</sub> emissions without specific measures)

(Source: MinebeaMitsumi Green Bond Framework)

Based on the above, JCR assesses that the use of funds determined by MinebeaMitsumi is a measure that contributes to the achievement of MinebeaMitsumi's environmental targets, all of which are expected to have a high environmental improvement effect.

## b. Negative Impacts on the Environment

MinebeaMitsumi specifies in the Framework that all eligible candidate projects are addressing environmental and social risk reduction issues with respect to:

- Compliance with environment-related laws and regulations required by the national and local governments where the business is located
- Compliance with safety laws and regulations for the construction and introduction of plants and production equipment and construction and operation of solar power and other clean power generation plants required by the national and local governments where the business is located
- Providing sufficient explanations to local residents in the implementation of the project

Most of MinebeaMitsumi's manufacturing facilities are electrified, and the environmental impact on the atmosphere associated with manufacturing is small. In addition, efforts are being made to exceed the level required by regulations to minimize waste and wastewater from factories through the adoption of highly energy-efficient equipment and processes. Especially with regard to wastewater, it has introduced the "Plant Wastewater



Zero System” in the Thailand and China, where water consumption is high, and are working to eliminate wastewater discharged from factories and their environmental impacts.

Based on the above, JCR assesses MinebeaMitsumi as dealing appropriately with the negative impact on the environment.

### c. Consistency with SDGs

JCR evaluated the use of proceeds set out in the Framework contributes to the following SDGs goals and targets referring to SDGs mapping of ICMA.



#### Goal 7: Affordable and clean energy

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**Target7.2** By 2030, increase substantially the share of renewable energy in the global energy mix

**Target7.3** By 2030, double the global rate of improvement in energy efficiency



#### Goal9 : Industry, innovation and infrastructure

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**Target9.4** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities



#### Goal12 : Responsible consumption and production

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**Target12.2** By 2030, achieve the sustainable management and efficient use of natural resources



#### Goal13 : Climate action

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**Target13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

## Evaluation Phase 2: Management, Operations and Transparency Evaluation

Based on the current situation described below and JCR's evaluation of the subject, JCR evaluated that the management and operational system had been well developed, that transparency was very high, and that it was fully expected that the project would be implemented as planned and that the proceeds would be adequately allocated. In Phase 2, JCR evaluated “m1 (F)” as the highest level in terms of management, operation and transparency.

### 1. Appropriateness and Transparency Concerning Selection Standard and Processes of Use of Proceeds

#### (1) JCR's Key Consideration in This Factor

In this section JCR confirms the objectives to be achieved through green financing, the appropriateness of green project selection standards and processes, and whether or not a series of processes are properly disclosed to investors and others.

#### (2) Current Status of Evaluation Targets and JCR's Evaluation

##### a. Goals

<The Framework for Issuing Green Finance>

#### **QCDESS Strategy and Reducing Environmental Impact**

As a manufacturer of ultra-precision components, efforts for green transformation (GX) pose an urgent challenge amid calls for reduction of CO<sub>2</sub> emissions throughout the entire supply chain. As a result, components and products which do not help to reduce CO<sub>2</sub> emission volume are likely to be weeded out from the market.

In response, we have announced that our management strategy will be centered on developing, manufacturing and selling products that are environmentally friendly and efficient, in addition to quality, cost, delivery date and service. This has entailed freshly laying a solid foundation for our 100th year – enlisting “QCDESS,” thereby adding “Eco/Efficiency and Speed” to “QCDS” (Quality, Cost, Delivery and Service), which serves as a source of competitiveness in the manufacturing industry.

Specifically, two pillars of the QCDESS strategy are (i) Challenges toward carbon neutrality and (ii) Expand “MMI Beyond Zero”.

##### **(i) Challenges toward carbon neutrality**

In order to realize carbon neutrality, the Company intends to promote reduction of own CO<sub>2</sub> emissions. If no specific measures are taken to achieve the Company's sales target of JPY2.5trn in FY2030, the Company's emissions are expected to increase several times from current levels. Thus the Company will utilize renewable energies, including introduction of solar power, and promote energy conservation, aiming to reduce CO<sub>2</sub> emissions by 30% from FY2020.

##### **(ii) Expand “MMI Beyond Zero”**

“MMI Beyond Zero” is to contribute to carbon neutrality by improving energy-saving efficiency of our products. Specifically, by increasing the precision of the products, we will contribute to reduction of CO<sub>2</sub> emissions by our customers and their customers by reducing the power consumption of products that use our products.

The contribution was calculated in accordance with Japan Electronics and Information Technology Industries Association (JEITA) guidelines. “Effect of CO<sub>2</sub> emissions reduction at the time of use of our products” indicates the amount of power consumption reduction when comparing the power consumption of the evaluated product with the power consumption of the same product equipped with previous generation parts.

In FY2020, when the Company started to calculate the amount of reduction contribution, the amount of CO<sub>2</sub> reduced reached 1,759,000 t-CO<sub>2</sub>. By FY2030, the Company aims to increase the amount of this contribution by 30%.

<JCR's Evaluation for the Framework>

In September 2021, MinebeaMitsumi revised its management philosophy to "To contribute to realization of a sustainable, eco-friendly and prosperous society by providing better products, at a faster speed, in larger numbers, at a lower cost and by smarter means." In light of changes in the external environment such as decarbonization, MinebeaMitsumi also revised its materiality as an important management issue. As one of its materiality, the Company has set "Contributing to the resolution of global environmental issues," and aims to make efforts for it by satisfying both of "reducing global CO<sub>2</sub> emissions through environmentally conscious products," which leveraging its strength in ultra-precision machining processing technologies and integration, and "minimizing the environmental impact of its business activities." In addition, MinebeaMitsumi's announced environmental targets include a 30% increase in CO<sub>2</sub> emissions reduction contribution compared to fiscal 2020 (approximately 2.3 million metric t-CO<sub>2</sub>, target for fiscal 2030), a 90% or more sales ratio for Green Products (target for fiscal 2028), and a 30% reduction compared to fiscal 2020 (target for fiscal 2030).

Of the uses of proceeds stipulated in the Framework, Classification A: Production and Research and Development of ball-bearings, as mentioned above, and is a measure to vigorously promote the sustainability of the Company itself and the sustainability of the planet as a whole. In other words, it is consistent with "reducing global CO<sub>2</sub> emissions through environmentally conscious products." It contributes to CO<sub>2</sub> emission reduction target of the environmental target. Classification B of the uses of proceeds is consistent with "minimizing the environmental impact of business activities," and is evaluated by JCR as a use that contributes to the Company's own targets for reducing CO<sub>2</sub> emissions in environmental targets.

Based on the above, JCR has evaluated that the businesses covered by the Framework are consistent with MinebeaMitsumi's management philosophy and environmental targets.

**b. Selection standards**

The selection standards for use of funds at MinebeaMitsumi are as described in Phase 1 of the evaluation. JCR evaluates the aforementioned selection criteria as being at a level that targets projects that are highly significant in promoting global and social sustainability.

**c. Processes**

<The Framework for the Selection Process>

**Process for Project Evaluation and Selection**

Business Headquarters in charge will map out business plans for projects defined above, a review committee consists of members of Business Administration Department and Corporate Finance Department will conduct a preliminary review and the Company's executive officers will make a decision. After that, Corporate Finance Department will select projects following discussions with divisions in charge to confirm eligibility before Chief of Tokyo Head Office will make the final decision.

<JCR's Evaluation for the Framework>

In MinebeaMitsumi's Green Bond selection process, businesses that have made a high degree of contribution to the environment and that have been confirmed to be implementing initiatives to reduce environmental and social risks are designated as green eligible projects. Confirmation of the high degree of contribution to the environment is judged by the Group Environmental Management Office based on (i) the content of the project plan formulated by the headquarters in charge of the relevant project and (ii) the status of compliance with the standards as Green Products within the Company in terms of CO<sub>2</sub> emission reductions due to the implementation of the relevant project. Based on this information, the Review Committee, which is composed of members such as the Business Administration Department and the Corporate Finance Department, conducts preliminary reviews, and based on the results of these reviews, the Board of Directors, which is the Company's business decision-making body, finally decides.

When the actual funds raised are appropriated, the Business Administration and Corporate Finance Departments take the lead in determining the allocation of funds. The Corporate Finance Department consults and confirms with the project unit in charge, and the Director, Chief of Tokyo Head Office ultimately determines and decides whether the appropriated candidate project fits the requirements of the eligible project.

Based on the above, JCR has determined that an appropriate selection process has been established because the Group Environmental Management Office, which is a specialized department within the Company, determines greenness and it is finally determined by the Board of Directors, and the Chief of Tokyo Head Office, who specializes as a director in appropriating funds, makes final decisions.

MinebeaMitsumi's goals, selection criteria and processes set out in the Framework are properly structured. MinebeaMitsumi will specify the goals, selection criteria, and processes as the requirements to be met by the Green Bond on the Framework, and will post and disclose the Framework documents on the web page. In addition, the content of the Framework will also be described in the disclosure documents for bond issuance, and investors will be informed of the content of the Framework, and the content of these will also be explained directly to investors through IR to investors in bond issuance. Therefore, transparency is ensured.

## 2. Appropriateness and Transparency of Management of the Proceeds

### (1) JCR's Key Consideration in This Factor

It is usually assumed that the management method of the funds varies widely depending on the issuer, but JCR confirms whether the funds procured by the Framework are properly allocated to green projects and whether a mechanism and an internal system are in place to ensure that the funds are easily tracked and managed by the issuer.

JCR also emphasizes assessing whether the funds procured under the Framework are expected to be used for green projects at an early stage, as well as how to manage and operate the funds that have not yet been allocated to them.

### (2) Current Status of Evaluation Targets and JCR's Evaluation

<The Framework for Management of the Proceeds>

#### **Management of Proceeds**

The Company's Corporate Finance Department will track and monitor the proceeds from the Green Bond offering to be allocated to any of eligible projects through the Company's internal management system. The Company will manage the unallocated proceeds in cash or cash equivalent until the full amount of the proceeds will be allocated, and the proceeds will be fully allocated within three years from the offering.

<JCR's Evaluation for the Framework>

MinebeaMitsumi's Corporate Finance Department issues instructions on fund management, and the person in charge in the Accounting Department in each region conducts fund management in accordance with the instructions. It will track and manage the Green Bonds issued in this Framework on a regular basis using an accounting control system developed in-house until redemption by the Corporate Finance Department so that an amount equal to the Green Bonds issued under this Framework is appropriated to any of the eligible projects. The Chief of Tokyo Head Office makes final approval for the management of funds. Proceeds from the Green Bonds will be invested in cash or cash equivalents in a safe manner until they are fully appropriated for eligible projects.

Regarding the plan for appropriation of proceeds based on the Framework, JCR confirmed that for all projects, MinebeaMitsumi for the appropriation plans to target projects that have been implemented and put into operation within two years from the issuance of the green bonds in the case of refinancing, and that the appropriation in the case of new financing will be completed within three years from the issuance of the bonds. In addition, JCR confirmed that it is planning to use the funds to be procured through the next bond issue for refinancing and new financing, and that it is appropriately planning the financing of the projects to which the funds will be allocated.

The accuracy of the figures in the internal accounting control system is secured by quarterly audits by an auditing firm in the process of compiling financial results in the Accounting Department and presenting them to the Management Committee by the General Manager of the Tokyo Headquarters. In addition, various documents related to financing, such as contracts and payment vouchers, are kept at appropriate locations in accordance with established management methods in accordance with laws and regulations and the document management methods established by the Company, for a specified period of time.

Based on the above, JCR has evaluated MinebeaMitsumi's fund management as being reasonable and transparent.

### 3. Reporting

#### (1) JCR's Key Consideration in This Factor

In this section, JCR evaluates whether the disclosure system for investors before and after the issuance of green bond, which is implemented with reference to the Framework, is planned in detail and in an effective manner.

#### (2) Current Status of Evaluation Targets and JCR's Evaluation

<The Framework for Reporting>

##### Allocation Report

The Company will report the allocation of the proceeds, including following items on allocation of proceeds to eligible projects, on an annual basis until all proceeds from the Green Bond are appropriated, to the extent practically possible.

- ✓ Amount of allocation of proceeds to eligible projects and amount of unallocated proceeds
- ✓ When to allocate if any unallocated proceeds
- ✓ Proportion of new financing and refinancing

The first allocation report will be published within one year from the date of issuance. If significant events occur after allocation and the impact of the events significant changes in the allocation plan, the Company will promptly disclose the information.

##### Impact Report

The Company will publish impact report, including following items, on an annual basis until maturity of the Green Bond to the extent practically possible. If significant events occur, the Company will promptly disclose the information.

Business Categories	ICMA GBP Categories	Eligible Projects	Impact Report Items (examples)
Production and Research and Development of ball-bearings	• Eco-efficient and / or circular economy adapted products, production technologies and processes	■ Power-saving high quality bearings	<ul style="list-style-type: none"> <li>• Overview of technologies and products</li> <li>• Amount of CO<sub>2</sub> emissions reduced when used by customers (t-CO<sub>2</sub>/year)</li> <li>• For R&amp;D purposes;               <ul style="list-style-type: none"> <li>• Overview of the R&amp;D plan and its progress</li> <li>• Overview of targeted business and target effect (expected purposes and products)</li> </ul> </li> </ul>
		■ Ultra-high performance bearings	

	<ul style="list-style-type: none"> <li>• Clean Transportation</li> </ul>	<ul style="list-style-type: none"> <li>■ Bearings for main motors of EVs</li> </ul>	<ul style="list-style-type: none"> <li>• Overview of technologies and products</li> <li>• The number of xEVs embedded (units/year)</li> <li>• For R&amp;D purposes;               <ul style="list-style-type: none"> <li>• Overview of the R&amp;D plan and its progress</li> <li>• Overview of targeted business and target effect (expected purposes and products)</li> </ul> </li> </ul>
<b>Procurement of decarbonized power sources</b>	<ul style="list-style-type: none"> <li>• Renewable Energy</li> </ul>	<ul style="list-style-type: none"> <li>■ Introduction, operation and maintenance of solar energy and other clean energy to the Company's facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing CO<sub>2</sub> emissions in the areas where such facilities are located (t- CO<sub>2</sub>/year)</li> </ul>
		<ul style="list-style-type: none"> <li>■ Purchasing renewable energy</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing CO<sub>2</sub> emissions (t- CO<sub>2</sub>/year)</li> </ul>

<JCR's Evaluation for the Framework>

**a. Reporting on the allocation status of the proceeds**

MinebeaMitsumi plans to annually disclose the appropriation of the proceeds from the Green Bond either on its website or in its integrated report, or both. In the event that there is a major change in the target of appropriation of the financing, such as a loss, and the unappropriated funds arise, the content will be disclosed in the same way. JCR assesses that reporting on the appropriation of funds is appropriate.

**b. Reporting on environmental improvement effects**

MinebeaMitsumi plans to annually disclose the content of the Framework either on its website or in its integrated report, or both as a reporting item for environmental improvement effects. Contributing amounts to reduce CO<sub>2</sub> emissions during use by customers in manufacturing and R&D of ball bearings shall be calculated in accordance with the guidelines of the Japan Electronics and Information Technology Industries Association (JEITA). The reduction in power consumption when the power consumption of the product to be evaluated is compared with the power consumption of the product in which the components of one generation before are installed is defined as the reduction effect, using the calculation formula (p.4) described in the evaluation phase 1.

Based on the above, the content of the report includes concrete and quantitative data on the effects of environmental improvement. JCR evaluates that the disclosure items and the frequency of disclosure specified in this report plan as appropriate, because the indicators related to the effects of environmental improvement are expected to be fully disclosed.

## 4. Organization's Environmental Initiatives

### (1) JCR's Key Consideration in This Factor

In this section, JCR evaluates whether the management of the issuer regards environmental issues as a high priority issue for management, and whether the green finance policy, process, and selection criteria for green projects are clearly positioned through the establishment of a department specializing in environmental issues or collaboration with external organizations.

### (2) Current Status of Evaluation Targets and JCR's Evaluation

MinebeaMitsumi's management philosophy is "To contribute to realization of a sustainable, eco-friendly and prosperous society by providing better products, at a faster speed, in larger numbers, at a lower cost and by smarter means." Originally, based on the belief that the essence of management is "sustainability," the Company adopted the management philosophy of "To contribute to realization of a society by providing better products, at a faster speed, in larger numbers, at a lower cost and by smarter means." Under this management philosophy, the Company had been pursuing continuous growth and sustainability and working to maximize profits and manage risks. In September 2021, the Company revised its management philosophy with the viewpoint of "sustainability" with the aim of achieving further growth for the future and sustainable development of the planet and society, in light of the fact that corporate attitudes toward environmental and social issues have been more required than ever to realize a decarbonized society and achieve SDGs in recent years. In light of changes in the external environment, such as decarbonization, the materiality has also been reexamined as an important management issue, and "Contributing to the resolution of global environmental issues" has been listed as an important issue.

Figure 4. MinebeaMitsumi Group's Management Philosophy, Materiality, and Environmental Targets



(Source: MinebeaMitsumi Group Integrated Report 2021)

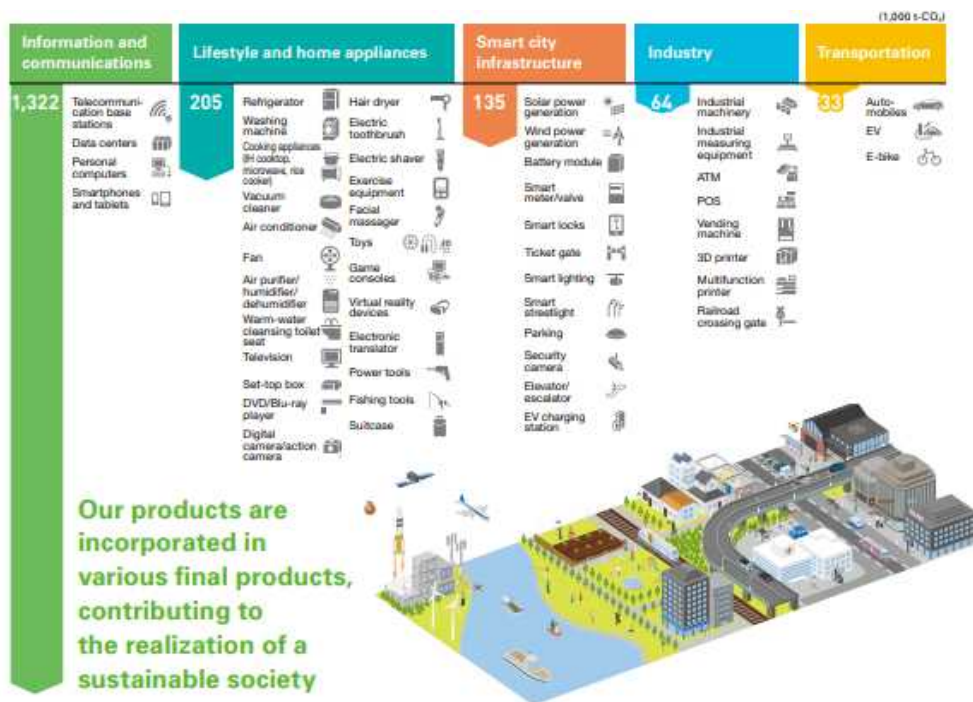
In May 2021, MinebeaMitsumi explained its new Medium-term Business Plans goals and announced its QCDESS Strategy as the groundwork for the 100th anniversary of its foundation in 2051. This is a combination of "Eco/Efficiency" and "Speed" to "QCDS (Quality, Cost, Delivery, and Service)," which is the source of competitiveness in the manufacturing industry. By placing not only quality, price, delivery time, and service, but also the development, manufacture, and sale of products thoroughly considering the environment and efficiency at the center of the management strategy, it hopes to contribute to the improvement of the global environment through its corporate activities themselves. The two major measures of QCDESS Strategy are (i) Challenges toward carbon neutrality (to reduce its own emissions of CO<sub>2</sub>), and (ii) Expand "MMI Beyond Zero" (to contribute to reducing CO<sub>2</sub> emissions). Furthermore, MinebeaMitsumi is working to develop and popularize environmentally conscious products, such as



the MinebeaMitsumi Green Products System (\*), in addition to the measures described in (i), (ii). According to MinebeaMitsumi's calculations, the amount of CO<sub>2</sub> emissions reduction in fiscal 2020 was 1,759,000 metric t-CO<sub>2</sub>, and the ratio of Green Products to sales in fiscal 2020 was 87.4%.

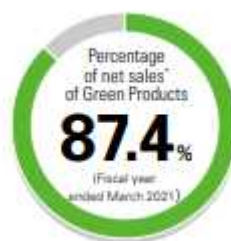
\*MinebeaMitsumi Green Products System: A system introduced in 2019 to select products that contribute particularly well to the environment among those that contribute to saving space and energy. The requirements for system accreditation are disclosed internally and selected by the Environmental Management Office, which is a specialized department. Certified products can be publicized with a certified mark, and they can be explicitly appealed both inside and outside the Company as having a high degree of environmental contribution.

Figure 5. MinebeaMitsumi Group's Actual Volume of Avoided CO<sub>2</sub> Emissions



(Source: MinebeaMitsumi Group Integrated Report 2021)

Figure 6. Percentage of Net Sales of Green Products



(Source: MinebeaMitsumi Group Integrated Report 2021)

MinebeaMitsumi has established the Head of Sustainability Management Division to carry out the above initiatives. Calculation of CO<sub>2</sub> emission reductions is conducted by the Group Environmental Management Office belonging to the Head of Sustainability Management Division. In addition, the Environmental Management Committee, the Risk Management Committee, and Carbon Neutral Steering Committee (CNSC) have been established as committees that do not belong to any of the departments and as organizations directly under the President and Chief Executive Officer.

The Environmental Management Committee is a committee that deeply considers climate change issues, and discusses evaluations of risks and opportunities related to climate change and response plans. The Risk Management Committee makes important decisions on risk management for the entire company, and responds to climate change risks in cooperation with the Environmental Management Committee. The Environmental Management Committee and the Risk Management Committee shall regularly report to the Board of Directors on risks, opportunities, and the status of responses to each of them related to climate change. CNSC was established in 2021 to respond to social changes, such as the Green Transformation (GX). It discusses how to deal with climate change, such as the procurement of power sources, and is positioned as a forum for companywide consensus building. The chairman of CNSC is a former Deputy Director General, Ministry of the Environment, and a professor at Hokkaido University Graduate School and Tohoku University Graduate School.

MinebeaMitsumi also acknowledges the importance of climate-related financial disclosure and endorses the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in 2020. Furthermore, the Company has received external evaluations of "A-" in both "CDP Climate Change 2021" and "CDP Water Security 2021." The Company's internal environmental management is certified by an external ISO 14001 audit.

Based on the above, JCR has evaluated environmental issues as a high priority issue for management, and that internal and external experts with expert knowledge are involved in sustainability initiatives as an organization.

■Evaluation result

Based on the JCR Green Finance Evaluation Methodology, JCR assigns “g1 (F)” for the “Greenness Evaluation (Uses of Proceeds)” and “m1 (F)” for the “Management, Operation, and Transparency Evaluation.” As a result, JCR assigns “Green 1 (F)” for the “JCR Green Bond Framework Evaluation” to the Framework. The Framework meets the standards for the items required in the Green Bond Principles and the Green Bond Guidelines.

[JCR Green Bond Framework Evaluation Matrix]

		Management, Operation, and Transparency Evaluation				
		m1(F)	m2(F)	m3(F)	m4(F)	m5(F)
Greenness Evaluation	g1(F)	Green 1(F)	Green 2(F)	Green 3(F)	Green 4(F)	Green 5(F)
	g2(F)	Green 2(F)	Green 2(F)	Green 3(F)	Green 4(F)	Green 5(F)
	g3(F)	Green 3(F)	Green 3(F)	Green 4(F)	Green 5(F)	Not qualified
	g4(F)	Green 4(F)	Green 4(F)	Green 5(F)	Not qualified	Not qualified
	g5(F)	Green 5(F)	Green 5(F)	Not qualified	Not qualified	Not qualified

(Responsible analysts for this evaluation) Atsuko Kajiwara and Haruna Goto

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## Important explanation regarding the evaluation of the Green Finance Framework

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### 1. Assumptions, Significance, and Limitations of JCR Green Finance Framework Evaluation

JCR Green Finance Framework evaluation, which is granted and provided by Japan Credit Rating Agency, Ltd. (JCR), covers the policies set out in the Green Finance Framework, and expresses the overall opinion of JCR at this time regarding the appropriateness of the Green Project as defined by JCR and the extent of management, operation and transparency initiatives related to the use of funds and other matters. Therefore, it is not intended to evaluate the effects of specific environmental improvements, management and operation systems, and transparency of individual bonds and borrowings, etc. to be implemented based on these policies. In the event that an individual bond or individual borrowing based on this Framework is subject to a green finance evaluation, it is necessary to conduct a separate evaluation. In addition, the JCR Green Finance Framework evaluation does not demonstrate the environmental improvement effects of individual bonds or borrows implemented under this Framework, and does not assume responsibility for environmental improvement effects. In principle, JCR does not directly measure the environmental improvement effects of funds procured under the Green Finance Framework, although JCR confirms the quantitative and qualitative measures by the issuer or a third party requested by the issuer.

### 2. Method used to perform 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

The act of granting and providing an evaluation of JCR Green Finance Framework is conducted by JCR as a related business and differs from the act related to the credit rating business.

### 4. Relationship with Credit Ratings

The Evaluation is different from the Credit Rating and does not commit to provide or make available for inspection a pre-determined credit rating.

### 5. Third-Party Evaluation of JCR Green Finance Framework Evaluation

There are no capital or personnel relationships that may result in a conflict of interest between the evaluation parties and JCR.

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#### ■ Matters of Attention

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#### ■ Glossary

JCR Green Finance Framework Evaluation: The extent to which the funds procured through green finance are appropriated for green projects as defined by JCR, and the degree to which the management, operation, and transparency of the green finance are managed. Evaluations are performed on a 5-point scale, from the top to the top using the Green1 (F), Green2 (F), Green3 (F), Green4 (F), and Green5 (F) symbols.

#### ■ Status of Registration as an External Evaluator of Green Finance

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

#### ■ Other status of registration as a credit rating agency, etc.

- Credit Rating Agency Commissioner (Rating) No. 1
- EU Certified Credit Rating Agency
- NRSRO: JCR is registered in the following 4 classes of 5 credit rating classes (as defined by the NRSRO (Nationally Recognized Statistical Rating Organization of the U.S. Securities and Exchange Commission): (1) Financial institutions, broker-dealers, (2) insurance companies, (3) general business corporations, and (4) governments and municipalities. If we are subject to disclosures under Rule 17g-7(a) of the U.S. Securities and Exchange Commission, such disclosures are attached to news releases appearing on the JCR website (<https://www.jcr.co.jp/en>).

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