

———— Green Bond Evaluation by Japan Credit Rating Agency, Ltd. ————

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

## JCR Assigned Green 1 to Series 82 Unsecured Corporate Bonds issued by Odakyu Electric Railway Co., Ltd.

S u b j e c t	: Odakyu Electric Railway Series 82 Unsecured Corporate Bonds (with limited inter-bond pari passu clause)
T y p e	: Bonds
Issue amount	: JPY 10 Billion
Interest rate	: 0.10%
Date of issuance	: January 31, 2019
Redemption date	: January 25, 2022
M e t h o d o f r e p a y m e n t	: Bullet
Use of proceeds	: Refinancing and new investments to the green assets

### <Green Bond Evaluation Results>

Overall evaluation	Green 1
Greenness Evaluation (use of proceeds)	g1
Evaluation on Management, Operation and Transparency	m1

## Chapter 1: Evaluation Overview

Odakyu Electric Railway Co., Ltd. (Odakyu) is a major private railway company founded in May 1923 as Odawara Express Railway Co., Ltd. The company merged with Tokyu Corporation during World War II, but in June 1948 it was separated and became independent as current Odakyu Electric Railway Co., Ltd. Odakyu operates a wide range of business activities, including transportation and merchandising mainly in the West-Tokyo and Kanagawa areas. Its core railway operations include Odakyu Odawara Line (Shinjuku to Odawara), Odakyu Enoshima Line (Sagami-Ono to Katase-Enoshima) and Odakyu Tama Line (Shin-Yurigaoka to Karakida) with a total of 120.5 km. The number of passengers per day stands at about 2.07 million. In order to improve convenience, Odakyu has also

through-services between Tokyo Metro Chiyoda Line, JR East Joban Line (Local), Hakone Tozan Railway and JR Gotemba Line.

As of August 2018, a Odakyu Group, a corporate group with the centered in Odakyu Electric Railway Co., Ltd., has 99 group companies Odakyu Group defines three stages activities areas of activity and priority as the direction of its CSR activities. In terms of environmental issues, the Group has set "promotion of environmentally responsible initiatives" within the three prioritized areas. Odakyu implements to proactively promote an effort to reduce environmental footprint by several initiatives such as "Odakyu Group Environmental Strategy", "Reduce environmental footprint", "initiatives to live together with nature" and "Odakyu Environmental Room". Also, Odakyu Group is engaged in the activities to protect nature with the residents along the Odakyu lines in the area such as Hakone, Enoshima and Tanzawa-Oyama.

"Odakyu Group Environmental Strategy", which was designed in October 2008, has been implementing since fiscal year 2010 with the aim of addressing changes in the regulation for environmental footprint and customer's environmental awareness. In addition, Odakyu is working to promote environmental activities by operating an environmental management system on a company-wide basis. Also, Ono Rolling Stock Depot located near Sagami-Ono Station, acquired ISO14001 certification, the international standard for environmental management systems, in fiscal year 2000.

Bonds subject to evaluation are unsecured corporate bonds issued by Odakyu. The proceeds of this bond issue will be allocated to replace old trains to new or renewed train that achieves reduction effect on power consumption in comparison to the existing train, to the multiple double-track project and to the renovation of the station.

As is described above, Odakyu Group designs "Odakyu Group Environmental Strategy", which sets out the direction of the Group from an environmental point of view, in order to implement "promotion of environmentally responsible initiatives", one of the three prioritized areas of CSR activities. Odakyu defines the actions that will contribute to "promotion of environmentally responsible initiatives" as eligible criteria for green bonds. Odakyu also assesses that the use of proceeds for green bonds meets the eligibility criteria.

In selecting the green bond project, Odakyu has made a strong commitment by the management team to issue the green bond. For example, a decision was made by the President & CEO. In addition, Odakyu has implemented environmental assessment procedures based on the ordinance and implemented measures to deal with risks through compliance with various laws and regulations in order for verifying any possible environmental or social risks of the proceeds. In addition, JCR confirms that the internal control system of the management of proceeds is secured by conducting an internal audit of the proceeds twice a year and by the approval of the head of Finance and Accounting.

JCR has confirmed that the management and operation system and transparency work, including the process of Odakyu's selection of the green bond project. JCR evaluates the management system and transparency of the bonds issued by Odakyu as robust and highly transparent.

In conclusion, JCR assigns "g1" for "Greenness Evaluation (Use of Proceeds)" and "m1" for "Management, Operation and Transparency Evaluation". As a result, JCR assigns "Green1" as an overall evaluation result to the bonds. Detailed evaluation results are discussed in detail in the next chapter. The bonds are considered to meet the standards for items required by the Green Bond Principles<sup>1</sup> and the Green Bond Guidelines<sup>2</sup> issued by the Ministry of Environment of Japan.

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<sup>1</sup> ICMA(International Capital Market Association) Green Bond Principles 2018

<sup>2</sup> Ministry of the Environment Green Bond Guidelines 2017

## Chapter 2: Current Status of the project on each evaluation factor and JCR's evaluations

### Evaluation Phase 1: Greenness Evaluation

JCR assigns "g1", the highest grade, to "Evaluation Phase 1: Greenness Evaluation".

Rationale: 100% use of proceeds of the bond will be allocated to a green project, considering the factors described below.

#### (1) JCR's key consideration in this factor

In this section, JCR first assesses whether the proceeds will be allocated to green projects that have explicit improvement effects on environment. Next, JCR assesses whether an internal department/division which is exclusively in charge of environment issues or a third party agency prove it sufficiently and have taken necessarily workaround or mitigation measures, in case of possibility on use of proceeds have negative impact on the environment. Finally, it confirms consistency with the Sustainable Development Goals (SDGs).

#### (2) Current status of evaluation targets and JCR's evaluation

##### Overview of Use of Proceeds

##### a. On the environmental improvement effects of the project

##### i. 100% of the proceeds will be allocated to both the refinancing and new investment into clean transportation projects that have high environmental improvement effects.

Odakyu has established "Odakyu Group Environmental Strategy" as the environmental basic policy to promote the implementation of environmental preservation projects defined as one of the prioritized areas for social responsibility. According to the criteria for eligible projects, Odakyu Group defines eligible criteria of green bonds as actions that will contribute to achieve the implementation of the environmental preservation projects.

Use of proceeds of the bond will be allocated to the following three projects, which Odakyu concludes them eligible under its criteria.

(List of use of proceeds)

	Use of proceeds	Equipment
1	Switch to new or renewed train that achieves reduction effect on power consumption in comparison to old-fashioned conventional train.	Commuter Trains:Series 1000(Renewal) Limited Express Romancecar:EXEa(30000 series)(Renewal), GSE(70000 series)(Newly Construction)  Introduce weight-saving train, introduction of variable-frequency drive, effective utilization of Regenerative brake, adaption of LED car light/side rollsign with light switch off control for energy saving and longer operational life, switching Heat-absorbing/UV cut glass
2	Multiple double track project	Remaining construction work (around Shimo-Kitazawa station)
3	Renovation of the stations	Platform extension(Yoyogi-Hachiman, Kaisei), Installation of platform screen doors, Station greening activities

Regarding the new introduction of trains and the improvement of existing trains project, the proceeds will be used for the renewal of 1000 series commuter train which began operation in 1988, the refinance for the purchasing cost of the new Limited Express Romancecar 70000 series (GSE) which started operation in 2018, and the renewal of Limited Express Romancecar 30000 series (EXE) which started operation in 1996. After renewal, EXE will be renamed to EXEα.

In the renewal of the 1000 series commuter train, the variable-frequency drive<sup>3</sup> device that controls the acceleration and deceleration of the train was the first in the world to use a full SiC (silicon carbide) element with a high heat resistance and low switching loss when the current is turned on and off. Compared to the conventional 1000 series commuter train, the renewal train achieved an approximately 80% reduction in both weight and volume. The vehicle is also equipped with a regenerative brake that allows the motor to act as a generator when the train is braked, restores the power generated to the overhead line, and reuses (regenerative) as energy for other trains in operation. JCR has confirmed that Odakyu is working to reduce the voltage from the substation in order to promote the reuse of power energy through regenerative braking. Through these efforts, Odakyu have reduced both electricity consumption and CO<sub>2</sub> emissions compared to the level prior to the renovation, and have achieved significant energy savings.

In addition, GSE have achieved energy saving by installing variable-frequency drive device with the above-mentioned full SiC (silicon carbide) element and by improving the efficiency of regenerative brakes and effectively utilizing regenerative power, and by significantly reducing both power consumption and CO<sub>2</sub> emissions compared to the retired Limited Express Romancecar 7000 series (LSE).

In the EXE renewal (EXEα), the installation of a variable-frequency drive device with a full SiC (silicon carbide) element has reduced power consumption and CO<sub>2</sub> emissions compared to conventional 30000 series (EXE).

In the multiple double-track project<sup>4</sup>, at the area between Higashi-Kitazawa and Izumi-Tamagawa (approximately 10.4 km) of the Odakyu Odawara Line, the continuous multi-level crossing project was carried out by elevating and going underground the railway lines in three areas: the Komae area (between Kitami and Izumi-Tamagawa, approximately 2.4 km), the Setagaya area (between Setagaya-Daita and Kitami, approximately 6.4 km), and the Shimo-Kitazawa area (between Higashi-Kitazawa and Setagaya-Daita, approximately 1.6 km). In March 2018, the multiple double-track project was completed. This reduced the time required from the main station to Shinjuku in the morning rush peak by up to 10 minutes.

As for the renovation of stations project, the extension of the platform of the two stations (Yoyogi-Hachiman and Kaisei) on the Odakyu Odawara Line will be carried out, and the transportation capacity will be enhanced by enabling the operation of 10-car trains. Odakyu also plans to install platform doors at Shimo-Kitazawa Station and other stations in order to improve safety on the platform. Plans are also being made for greening station buildings and their surroundings.

The above-mentioned multiple double-track project and the renovation of station are expected to reduce the time required and to improve the on-time operation, thereby enhancing the use of public transportation. JCR assesses this as a Shift/Maintain of transferring people to more sustainable and clean transport, among the Avoid-Shift-Improve (ASI) approaches referred to in the recommendations on how to measure impact reporting for clean transport projects published by the ICMA's Green Bond Principles Impact Reporting Working Group in June 2018.

<sup>3</sup> A device that controls an AC motor to control the acceleration force and speed of a train while changing the voltage and frequency.

<sup>4</sup> As part of road development in urban areas, businesses to facilitate urban traffic by eliminating large numbers of railway crossings at once, eliminating traffic congestion at railway crossings and accidents, and to promote the integration of urban areas divided by railways. The multiple line project is proceeding in concert with the continuous grade separation project which is the city planning project in Tokyo. Tokyo Metropolitan Government Bureau of Construction: <http://www.kensetsu.metro.tokyo.jp/english/jigyoo/road/04.html>

A method for assessing clean transport projects from an environmental or sustainability perspective, as referred to in the Working Group on ICMA Green Bond Principles.

Three methods, A (Avoid/Reduce), S (Shift/Maintain), and I (Improve), are preferred in the order of “A”, “S”, and “I”. “A” is for reducing the need for transportation and travel. “S” refers to a shift to more environmentally friendly transportation. “I” refers to improving the energy efficiency of transportation methods or vehicle technologies.

**ii. The use of proceeds falls under the category of "clean transport" among the green projects defined in the Green Bond Principles or the Ministry of the Environment's Green Bond Guidelines.**

**b. Negative impact on the environment**

Odakyu verifies the possibility of environmental and social risks when conducting a project, and takes measures to mitigate any possible negative risks. The potential negative environmental impact of the Green Project is as follows.

(1) Environmental risk

Constructions of new facilities use more electricity and may result in the increased CO<sub>2</sub> emissions.  
Disposal of existing facilities may cause a negative impact on the environment.

(2) Social risks

Installation of facilities related to eligible projects may cause a negative impact on the residents living in the vicinity (including noise, vibration caused by bringing-in and bringing-out of equipment and machines, impact on air quality, noise and vibration caused by installation operation of power generating facilities, etc.) It also may affect the scenery.

In the multiple double-track project, Odakyu carried out Environmental Impact Assessment procedures based on the Tokyo Metropolitan Environmental Impact Assessment Ordinance. In addition to conducting assessments of the environmental impact of the project during and after construction, Odakyu works to improve the safety management system and safety under the Railway Business Act. In addition, when necessary, Environmental Impact Assessments are conducted based on various ordinances, such as the multiple double-track project. In addition, we are promoting green procurement by prioritizing the purchase of environment-friendly products, parts, and materials. Together with our suppliers, Odakyu is working to comprehensively reduce environmental impact and contribute to global environmental conservation and a recycling-oriented society.

Through these efforts, Odakyu is measuring and mitigating negative environmental impacts.

### c. Consistency with SDGs goals and Targets

This project is classified as "Clean Transportation" as exemplified in the Green Bond Principles and in the Ministry of the Environment's Green Bond Guideline. JCR evaluates the project as contributing to the following SDGs objectives and targets, referring to the SDGs mapping of the ICMA.



#### **Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.**

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**Target 9.4.** 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

#### **Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.**

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**Target 11.2.** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

**Target 11.7.** By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

## Evaluation Phase 2: Evaluation on Management, Operation and Transparency

JCR assigns "m1", the highest rating on JCR Evaluation Phase 2: Evaluation on Management, Operation and Transparency.

Rationale: These projects will be allocated the funding and implemented the businesses as planned through a firmly equipped management and operation system and high transparency as described below.

### 1. Appropriateness and Transparency concerning selection standard and processes of the use of proceeds

#### (1) JCR's key consideration in this factor

In this section, JCR confirms that the objectives to be achieved through the green bond, the criteria for selecting green projects, the appropriateness of the process, and the series of processes are appropriately disclosed to investors.

#### (2) Current status of evaluation targets and JCR's evaluation

##### a. Goal

Odakyu Group defines the Group's CSR (Corporate Social Responsibility) as follows.

#### **Odakyu Group's CSR Definition**

By carrying out all daily operations with integrity,  
we will contribute to create "irreplaceable times" and "rich and comfortable lifestyles."  
We will achieve sustainable development together with society  
This is the social responsibility of Odakyu Group.

Odakyu Group defines the direction of its CSR activities under the definition as the three activity areas (initiatives to earn public trust, initiatives to contribute to society through business activities, and initiatives to contribute to society by making full use of the Group strengths) and the three priority areas (achieving security and safety, preparing for upcoming changes in local communities, and promotion of environmentally responsible initiatives). In terms of the environment, the promotion of environmentally responsible initiatives is placed in one of the three priority areas. Odakyu Group has designed "Odakyu Group Environmental Strategy", which sets out the direction of the Group from an environmental point of view, in order to implement "promotion of environmentally responsible initiatives".

#### **Odakyu Group Environmental Strategy**

Strategy 1: Enrichment of the products and services which meet customer's environmental awareness.  
Strategy 2: Provide user-friendly transportation network  
Strategy 3: Provide the tourism service for enjoying nature  
Strategy 4: Reduce environmental footprint caused by business activities  
Strategy 5: Environmental reservation along the Odakyu lines

Of the three projects, JCR confirmed that the construction of new trains and the improvement of existing trains are classified as Strategy 4 "Reduce environmental footprint caused by business activities", multiple double-track project and the renovation of stations as Strategy 2 "Provide user-friendly transportation network" respectively.

JCR evaluates that the issuance of the green bond will promote the "promotion of environmentally responsible initiatives" that are one of the three priority areas of Odakyu Group's CSR activities, and reduce environmental impact, such as reducing CO<sub>2</sub> emissions.

JCR also considers that all three projects are aligned with the functional strategies aimed at reducing environmental impact, and that they also met the aforementioned environmental targets.

**b. Selection criteria**

As noted above, Odakyu defines eligible criteria for actions that contribute to achieve the "promotion of environmental responsible initiatives," one of the three priority areas for CSR activities, and defines them as projects that are subject to green bonds.

**c. Process**

At Odakyu, Finance & Accounting Department and the CSR/Corporate Communications Department selects projects that meet the eligibility criteria. Thereafter, final decision on whether these selected projects get a green light will be approved by the President & CEO. The Environment Committee, chaired by the director in charge of Environment, will report about the selection of the projects.

Odakyu has made strong commitments by management regarding the issuance of green bonds. In addition, with regard to the environmental and social risks that the funds can be used for this issue, Odakyu is taking countermeasures against risks through the implementation of environmental assessment procedures based on ordinances and compliance with various laws and regulations.

JCR believes that the disclosure of an overview in this evaluation report ensures transparency to investors in terms of goal, selection criteria, and process.

## 2. Appropriateness and Transparency of management of the proceeds

### (1) JCR's key consideration in this factor

The management method of the proceeds is usually assumed to be diverse by the issuer. JCR assesses whether the proceeds firmly allocated to the green project, the project have internal systems to easily track the allocation of the proceeds and the money funded by the bond will be allocated to the green project at once.

JCR also considers the evaluation of management of unallocated money. It also attaches importance to evaluating the management and operation of the unallocated funds, as well as to confirming that the proceeds will be allocated to the green projects at an early stage.

### (2) Current status of evaluation targets and JCR's evaluation

- a. The proceeds of the bonds will be allocated to refinance and new investments in the three projects listed in this report and will not be used for any other purpose.
- b. Regarding account management, it is approved by the General Manager of Finance & Accounting Dept. and managed by internal systems when funding is received. JCR also confirms that the budget and actual expenditure of three projects are tracked and managed semi-annually.  
The proceeds from the bond are expected to be used to refinance and new projects within about two years.
- c. JCR confirms that Odakyu will conduct internal audit twice a year.
- d. The proceeds of the bond will be allocated to three refinance and new projects within about two years.  
Until all the proceeds will be allocated, those are managed in cash or cash equivalents. In case of unallocated



funds are incurred due to project cancellations or other reasons, the funds will be managed with cash or cash equivalents until they are allocated to projects that meet the eligible criteria.

JCR has confirmed that the funds will be securely allocated to the three projects, the account management is managed by Odakyu in an appropriate manner, an internal audit is in place, and unallocated proceeds will be adequately managed until they are allocated. In case of the project is discontinued, projects that meet the eligible criteria will be selected as alternatives and funds will be allocated to that alternatives. Therefore, JCR has evaluated that the Appropriateness and Transparency of Management of the proceeds is high.

### 3. Reporting

#### (1) JCR's key consideration in this factor

In this section, JCR evaluates whether the disclosure system for investors, etc. before and after the issuance of green bonds is planned in a detailed and effective manner at the time of the issuance of green bonds

#### (2) Current status of evaluation targets and JCR's evaluation

##### a. Reporting on the proceeds allocation

As confirmed in the previous section, the proceeds will be allocated to the three refinancing and new projects within about two years. The use of proceeds will be disseminated through the Amended Shelf Registration Statement and news releases at the time of bond issuance, as well as posters and leaflets on the stations and in the trains.

Odakyu plans to disclose any changes in the use of proceeds may occur after the issuance on its website. Odakyu will annually disclose the information on its website until all the proceeds are fully allocated to three projects that meet the eligibility criteria after approval by both General Manager of Finance & Accounting Department and CSR/Corporate Communications Department. The contents of disclosure are the amount of allocated proceeds based on the projects, the amount of unallocated proceeds and the amount of proceeds allocated to refinance existing expenditures. JCR believes that these are sufficient to disclose the appropriation of unallocated funds. In addition, Odakyu plans to disclose on its website any significant changes in funding status, such as the cancellation of projects to use the funds procured from the bonds.

##### b. Impact reporting for environmental benefits

The list and summary of the three projects are listed in the Evaluation Phase 1 of the Report. Odakyu plans to disclose the following environmental improvement indicators on its website on an annual basis.

- Rate of reduction of CO<sub>2</sub> per km (gCO<sub>2</sub> per kilometer)
- Noise and vibration reduction  
(the implementation rate of soundproof wheels, fully enclosed motors, low noise type compressors and skid preventing devices)
- Improvement in average delay time and the number of delayed trains
- Improvement of the average congestion rate
- Shortening of the necessary time
- Progress of platform extension
- Progress in installation of platform screen doors
- Station greening activities

Odakyu Green Bond will be reviewed by JCR annually on the accuracy of its reporting until the bond redemption.

JCR considers that the reporting is intended to appropriately disclose to investors both the use of proceeds and the effects of environmental improvement.

## 4. Organization's environmental activities

### (1) JCR's key consideration in this factor

In this section, JCR evaluates whether the issuer's management positions environmental issues as a high priority management issue, and whether the green bond policy, process and the criteria for selecting green projects are clearly defined through the establishment of a department specializing in the environmental field or through the assistance of external organizations.

### (2) Current status of evaluation targets and JCR's evaluation

Odakyu Group, led by Odakyu Electric Railway Co, Ltd., defines three areas of activity and priority as the direction of its CSR activities to achieve sustainable development together with society while faithfully carrying out all daily operations. In terms of the environment, the promotion of environmentally responsible initiatives is one of the three prioritized areas. Odakyu exemplifies "reduction of environmental footprint", "Initiatives to live together with nature", and "Odakyu Environmental Room". In terms of "reduction of environmental footprint", Odakyu cited following activities, introduction of more energy-efficient trains aimed at reducing further environmental impact of railways, such as the renewal of 1000 series commuter trains which are eligible criteria for the green bond, the renewal of air-conditioning equipment in commercial facilities and the use of LED lighting equipment. Odakyu is actively promoting the reduction of environmental footprint associated with business activities.

With regard to environmental and social contribution activities, Odakyu Group has been operating the Environmental Management System (EMS) since fiscal year 2000, defining the basic matters necessary for the promotion of environmental activities. In fiscal year 2008, Odakyu Group Environmental Strategy was established and has been implemented since fiscal year 2010 with the aim of understanding environmental activities more broadly and developing them together with business operations in order to adapt to changes in society, such as the strengthening of regulations regarding environmental loads and the increasing awareness of the environment. In addition, in order to promote business and environmental activities more comprehensively, the operation of the EMS has been drastically revised since fiscal year 2015 so that the environmental targets of each department can be linked to the medium-term management plan.

The medium-term environmental targets established in line with the medium-term management plan, which is linked to the annual environmental targets, and the PDCA cycle is operated on a yearly basis. The Medium-Term Environmental Targets are formulated after consultation between the relevant departments and the Environmental Committee chaired by the Director in charge of the environment. The Environmental Committee is responsible for ensuring that all departments are familiar with the Mid-Term Environmental Targets and for conducting internal environmental audits to confirm the status of the implementation of PDCA cycles. Odakyu is striving to promote environmental activities through the effective operation of EMS through these initiatives.

In addition, the Ono Rolling Stock Depot near Sagami-Ono Station has a wide range of adverse environmental impacts, such as waste generation and the use of chemical substances. Therefore, in fiscal year 2000, Ono Rolling Stock Depot acquired ISO14001 certification, the international standard for environmental management systems, and is carrying out its business activities with consideration for the environment.

As a result of these initiatives, Odakyu has generally achieved its Mid-Term Environmental Targets for the period from fiscal year 2015 to fiscal year 2017. Based on this, the Mid-Term Environmental Target from fiscal year 2018 to fiscal year 2020 (including a reduction of at least 11% in the basic unit of electricity received from fiscal year 2013 as a reference value by fiscal year 2020) has been formulated and efforts are being made to

achieve the target. In addition, efforts are being made to proactively reduce the environmental footprint of business activities and to conserve nature along the lines of Hakone, Enoshima, and Tanzawa-Oyama along with the residents of local communities. The President & CEO stated these initiatives in Odakyu's 2018 Environmental Report, and JCR appreciates them as indicative of management's high level of interest in environmental issues and view them as important priorities.

Odakyu also has an "EMS Secretariat" within the CSR/Corporate Communications Department to promote EMS. Personnel with environmental qualifications are assigned to the "EMS Secretariat". JCR evaluates that Odakyu has a department which has expertise in environment.

In issuing green bonds, Finance & Accounting Department and CSR/Corporate Communications which has the EMS Secretariat, selects projects that meet the eligible criteria, and the President & CEO makes the final decision on those projects. The Environmental Committee, chaired by the director in charge of Environment, then reports on selected projects.

JCR considers environmental issues as a high priority for the management of these organizations, and that departments with expert knowledge are clearly involved as organizations in the selection of green bond procurement policies and processes and green projects.

#### ■ Evaluation result

Based on the JCR Green Bond Evaluation Method, JCR assigns "g1" for "Greenness Evaluation (Use of Proceeds)" and "m1" for "Management, Operation and Transparency Evaluation". Consequently, JCR assigns "Green1" as an overall evaluation results to the bonds. The bonds are considered to meet the standards for the items required by the Green Bond Principles and the Green Bond Guideline of the Ministry of the Environment of Japan.

**[JCR Green Bond Evaluation Matrix]**

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

#### ■ Evaluation Subject

Issuer: Odakyu Electric Railway Co., Ltd. (Security Code: 9007)

#### [Assignment]

Subject	Issue amount	Date of issuance	Redemption date	Interest rate	Evaluation
Series82 Unsecured Corporate bonds (with limited inter-bond pari passu clause)	JPY 10 Billion	January 31, 2019	January 25, 2022	0.10%	JCR Green Bond Evaluation: Green1 Greenness Evaluation :g1 Management, Operation and Transparency :m1

Sustainable Finance Analysts: Atsuko Kajiwarra and Kosuke Kajiwarra

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## Important explanation of the Green Bond Evaluation

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

JCR Green Bond Evaluation, which is granted and provided by Japan Credit Rating Agency (JCR), is a comprehensive expression of JCR's current opinion on the extent to which the funds procured from the issuance of green bonds, which are subject to evaluation, are allocated to green projects defined by JCR and the extent to which the management, operation, and transparency of the use of green bonds are ensured. JCR Green Bond Evaluation does not fully indicate the extent to which the funds procured from such green bonds are allocated and the management, operation, and transparency of the use of the funds are ensured.

JCR Green Bond Evaluation assesses the plan or status of the appropriation of funds at the time of the green bond issuance plan or at the time of issuance, and does not guarantee the status of the appropriation of funds in the future. In addition, JCR Green Bond Evaluation does not prove the environmental effects of green bonds and is not responsible for their environmental effects. JCR confirms that the effects of the funds procured from the issuance of green bonds on the environment are measured quantitatively and qualitatively by the borrower or by a third party requested by the borrower, but in principle it does not directly measure the effects.

### 2. Methods used in the conduct of this evaluation

The methods used in this evaluation are listed on JCR website (Green Finance & ESG in <https://www.jcr.co.jp/en>) as JCR Green Finance Evaluation Method.

### 3. Relationship with Acts Related to Credit Rating Business

JCR Green Bond Evaluation is determined and provided by JCR as a related business, which is different from the activities related to the credit rating business.

### 4. Relationship with Credit Ratings

The Assessment differs from the Credit Rating and does not promise to provide or make available for inspection a predetermined Credit Rating.

### 5. Third-party character of JCR

There is no conflicts of interest related to capital or human resources relationships between the subject of this evaluation and JCR.

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#### ■Glossary

JCR Green Bond Evaluation: JCR Green Bond Evaluation evaluates the extent to which the funds procured from the Green bond are allocated to the Green Project as defined by JCR, and the extent to which the management, operation, and transparency of the Green Loan are ensured. Evaluations are graded on a scale of 5, beginning with the top, using the Green1, Green2, Green3, Green4, and Green5 symbols.

#### ■Status of registration as an external reviewer of green finance

- Ministry of the Environment's external green bond reviewer registration
- ICMA (registered as an observer with the International Capital Markets Association)

#### ■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 Securities and Exchange Commission's NRSRO(Nationally Recognized Statistical Rating Organization. (1)Financial institutions, broker dealers, (2) insurance companies, (3) general business corporations, and (4) government and local governments. If the disclosure is subject to Section 17g-7(a) of the Securities and Exchange Commission Rule, such disclosure is attached to the news releases posted on the JCR website (<https://www.jcr.co.jp/en/>).

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