



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

## Central Nippon Expressway Co., Ltd.

### 105th Unsecured Bonds(Social Bond)

#### Assignment



Issuer	Central Nippon Expressway Co., Ltd.
Subject	Central Nippon Expressway Co., Ltd. 105th Corporate Bond (Social Bond)
Type	Straight Corporate Bond
Issue Amount	JPY 120 billion
Interest Rate	0.597% (per annum)
Issue Date	March 28, 2024
Redemption Date	March 28, 2029
Method of Repayment	Bullet Redemption
Use of Proceeds	Projects that localize disasters and bring benefits to users

## Overview of Evaluation

### ▶▶▶ 1. Outline of Central Nippon Expressway Co., Ltd.

Central Nippon Expressway Co., Ltd. (NEXCO CENTRAL) is a special company wholly owned by the government. The business base of the NEXCO CENTRAL is based on the national route network owned by the Japan Highway Public Corporation, which extends from the Tokyo metropolitan area to the Chubu and Kinki regions, including the main routes such as the Tomei Expressway, Chuo Expressway, and Shin-Tomei Expressway. The core business is the expressway business, which involves the construction, management, and operation of expressways, but also related businesses such as the SA/PA business, which involves the management and operation of service areas (SA) and parking areas (PA). The company is based on group management, and as of the end of December 2023, it has 23 subsidiaries and 9 affiliated companies.

### ▶▶▶ 2. NEXCO CENTRAL's ESG Management and Sustainability Initiatives

NEXCO Central Japan Group has set "reducing global warming and consideration for the local environment" as one of the key themes of its CSR activities. The company has incorporated this CSR priority theme in its business plan, established an environmental policy, and established measures in line with the policy to "curb global warming," "promote the 3Rs of resources," and "consider the local environment." In the current management plan, "Management Plan Challenge V (Five) 2021-2025," the above-mentioned priority themes of CSR activities are reflected in business activities and the company has the following four management policies.

Management Policy 1: Deepen constant efforts to improve safety

Management Policy 2: Strengthen expressway functionality and evolve into an expressway space that is widely used by customers

Management Policy 3: Challenge to create new value that adapts to environmental changes such as digitalization and decarbonization

Management Policy 4: Strengthen the management foundation to continue meeting the expectations of customers and other stakeholders

### ▶▶▶ 3. About the Social Bond

The subject of this evaluation is the corporate bonds (the "Bonds") to be issued by NEXCO Central. JCR evaluates whether the Bonds aligns with the Social Bond Principles<sup>1</sup>, the Social Bond Guidelines<sup>2</sup> and SDGs. These principles and guidelines are voluntarily published by the International Capital-Marketing Association (ICMA) and the Financial Services Agency, respectively, and are not legally regulated based on evidences. JCR however refers these principles and guidelines as they are referred to as unified standards domestically and globally. A reference indicator in evaluation should be a mapping<sup>3</sup> of SDGs stipulated by ICMA with a social project category in Social Bond Principles since JCR emphasizes the consistency of the use of proceeds of social bonds and its social improvement impacts (hereinafter referred to as an "impact") with international sustainability goals or national policies.

<sup>1</sup> ICMA(International Capital Market Association) (2023) *Social Bond Principles*  
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/social-bond-principles-sbp/>

<sup>2</sup> Financial Services Agency (2021) *Social Bond Guidelines*  
<https://www.fsa.go.jp/news/r3/singi/20211026-2/01.pdf>

<sup>3</sup> ICMA (2023) *Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals*  
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/mapping-to-the-sustainable-development-goals/>

NEXCO CENTRAL plans to use the proceeds of the Bonds for new investment or refinancing of the following projects.

(1) Repair projects to weaken the power of disasters and minimize damage (bridges, earthwork structures (slopes), snow and ice countermeasure facilities, earthquake disaster countermeasures): 93 projects

(2) Repair projects (electrical facilities, communication facilities, construction facilities) to protect users and prevent secondary disasters through prompt information transmission: 90 projects

(3) Repair projects to safely evacuate users involved in disasters (tunnel disaster prevention/tunnel facilities): 4 projects

(4) A four-lane construction project that will benefit local residents by preventing expressway blockages in the event of a disaster and enabling prompt road restoration (however, it is limited to those that contribute to the widening of existing roads and the maintenance of redundancy in road functions): 32 projects

JCR evaluates that the above projects, for which the funds were used by NEXCO CENTRAL, are projects with outputs, outcomes and impacts defined for people affected by disasters, including natural disasters that occur around the existing expressway network under the company's jurisdiction. In addition, the above-mentioned uses of funds are evaluated as projects that will greatly contribute to building national resilience through disaster countermeasures. Furthermore, JCR evaluates the project selection process, fund management system, post-issuance reporting system, etc. as being appropriately structured and highly transparent.

Based on the above, JCR evaluates that the use of proceeds of this evaluation subject falls under the project category of "affordable projects" that target "expressway users during disasters" and "local residents near expressways" under the Social Bond Principles. JCR confirmed that they contributes to Goal 3 "Good health and well-being for all," Goal 9 "Create a foundation for industry and technological innovation," and Goal 13 "Take concrete measures to combat climate change" of the SDGs, and are also consistent with the Japanese government's policies in the field of land and transportation.

Furthermore, the project selection process, fund management system, post-issuance reporting system, etc. are evaluated as being appropriately structured and highly transparent.

Based on its JCR Social Finance Evaluation Methodology, JCR assigned "s1" for the "Socialness Evaluation (use of proceeds)" and "m1" for the "Management, Operation and Transparency Evaluation." As a result, JCR assigned "Social 1" for "JCR Social Bond Evaluation."

JCR evaluates that the Bonds meet the standards for the items required in the Social Bond Principles and the Social Bond Guidelines. JCR also evaluates that the Bond can contribute to the concrete measures for SDGs and the government's SDGs.

## Table of Contents

### ■Evaluation Phase 1: Socialness Evaluation

#### I. The overview of Use of Proceeds

JCR's Key Consideration on This Factor

Current Status of Evaluation Targets and JCR's Evaluation

1. Overview of use of proceeds
2. Social benefits of the project
3. Negative impacts on the environment and society
4. Consistency with SDGs
  - (1) Consistency with ICMA's SDGs mapping
  - (2) Consistency with SDGs action plan and social bond guidelines

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

#### I. Selection Standards and Processes for Use of Proceeds

JCR's Key Consideration on This Factor

Current Status of Evaluation Targets and JCR's Evaluation

1. Goals
2. Selection criteria
3. Process

#### II. Management of Proceeds

JCR's Key Consideration on This Factor

Current Status of Evaluation Targets and JCR's Evaluation

#### III. Reporting

JCR's Key Consideration on This Factor

Current Status of Evaluation Targets and JCR's Evaluation

#### IV. Organization's Sustainability Initiatives

JCR's Key Consideration on This Factor

Current Status of Evaluation Targets and JCR's Evaluation

### ■Evaluation Phase 3: Evaluation result (Conclusion)

## I. The overview of Use of Proceeds

### JCR's Key Consideration on This Factor

In this section, JCR first confirms whether the proceeds are used for social projects that bring about clear social benefits. Then, in cases where the use of proceeds is expected to have negative impacts on the society and environment, JCR confirms whether the impacts are fully examined by an internal specialized department or an external third party and whether necessary measures are taken for its workaround and mitigation. Finally, JCR confirms the consistency with Sustainable Development Goals ("SDGs".)

### ▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

The projects for which NEXCO CENTRAL used the proceeds from the Bonds are measures that contribute to the development of a sustainable society, which is the company's corporate philosophy, and are expected to have social benefits.

#### 1. Overview of use of proceeds

NEXCO CENTRAL has formulated a sustainable finance framework when issuing the Bonds. In this framework, NEXCO CENTRAL stipulates the following projects for which funds can be used.

### The Framework on use of proceeds

#### Use of Proceeds

<Summary of use of proceeds>

<Social Bond>

The following projects that will bring about benefits to expressway users in case of a disaster:

- Repair projects to weaken the power of disasters and minimize damage (bridges, slopes, snow and ice protection facilities and earthquake disaster measures)
- Repair projects to protect users through prompt information transmission to prevent secondary disasters (electrical facilities, communication facilities and architectural facilities)
- Repair projects to safely evacuate users involved in disasters (tunnel disaster prevention and tunnel facilities)

The following projects that will provide neighboring residents with benefits by preventing blockage of expressways in case of a disaster and enabling prompt road restoration.

- Four-lane projects (exclusively limited to projects that contribute to widening the existing roads and maintaining redundancy of road functions\*)

\*The projects that will reduce risks of blockage of roads by increasing two lanes to four, such as construction in areas where there are risks of landslides or slope collapse in case of a disaster.

The proceeds of the Bonds will be used for the following projects that meet the eligibility criteria established in the framework.

NEXCO CENTRAL Social Eligible Projects are as follows

(1) Repair projects (replacement of bridge supports, prevention of debris flow on slopes, installation/repair of snow and ice prevention facilities, seismic reinforcement work of bridges, etc.): 93 projects

(2) Repair Projects (updating and repairing various equipment such as road information boards, updating and repairing power receiving and distribution equipment to supply electricity to each equipment, updating and repairing transmission equipment to communicate with each equipment, etc. Renovation of management facilities, etc. to serve as disaster prevention bases): 90 projects

(3) Repair projects (installation of evacuation shafts in tunnels, reinforcement, renewal, and repair of ventilation equipment and emergency equipment, etc.): 4 projects

(4) Construction to convert a tentative 2 lane (1 lane on each side) section to 4 lanes (2 lanes on each side): 32 projects

It is expected that 100% of the proceeds from the issuance of the Bonds will be used for the social projects mentioned above. The amount allocated will be approximately 74 billion yen for (1), approximately 32 billion yen for (2), approximately 2 billion yen for (3), and approximately 12 billion yen for (4). The proceeds from the Bonds will be used for projects that will greatly contribute to solving the issues listed in the Cabinet Secretariat's "Basic Plan for National Resilience" through disaster countermeasures, and are expected to have social benefits. The funds will be used to provide "affordable basic infrastructure facilities" for "expressway users and local residents around expressways in times of disaster" as stipulated in the "Social Bond Principles" and "Social Bond Guidelines."

## 2. Social Benefits of the Project

<About Japan's natural disasters and the basic plan for national resilience>

Japan has traditionally suffered severe damage from natural disasters due to its land conditions, including topography, geology, and weather. Surrounded by the sea on all sides, the coastline is long and complex, making it susceptible to tsunami damage in the event of an earthquake.

The area at risk of floods, landslides, earthquakes (seismic intensity disasters), or tsunamis accounts for 21.5% of the country's total land area. On the other hand, as of 2015, the number of people living in disaster-prone areas was 86.03 million, accounting for 67.7% of the total population. Furthermore, by 2050, this proportion is predicted to increase to 70.5%.

Regarding flooding, since mountains and mountain ranges run through the center of the country, the overall length of the rivers is very short and steep compared to rivers in Europe and America, and when heavy rains hit, the river flow increases and floods occur. Such disasters are likely to occur. In addition, global warming is bringing about extreme climate change, and heavy rain disasters are becoming more severe. Along with this, landslides are also on the rise, and the amount of winter snowfall is also increasing. There are also concerns about disasters caused by heavy snow.

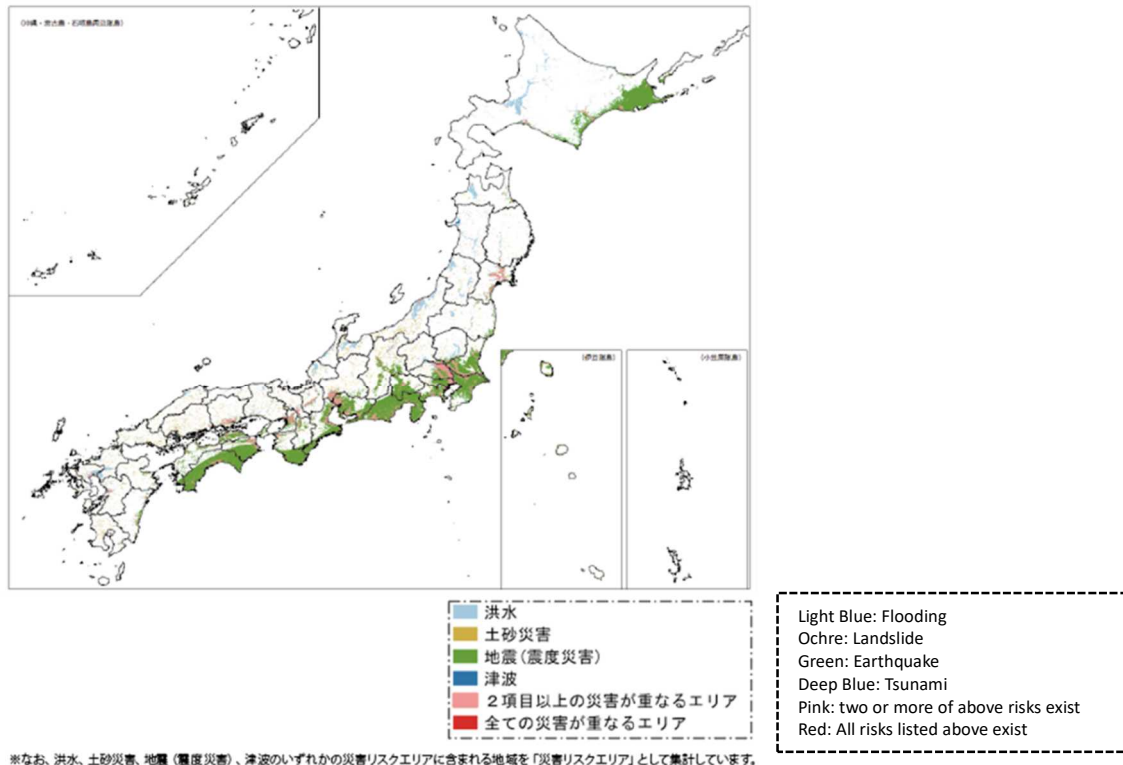


Figure 1: Natural disaster risks across Japan<sup>4</sup>

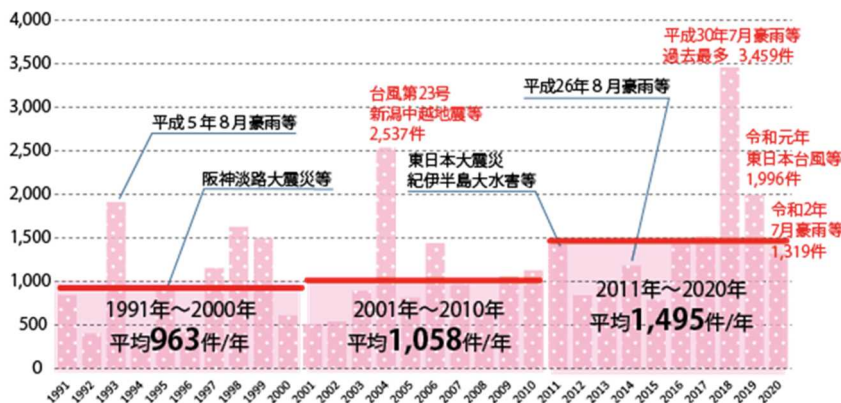


Figure 21: Trends in the number of landslide disasters<sup>5</sup>

The Japanese government formulated the Basic Act on National Resilience in 2013 to contribute to disaster prevention and mitigation, and is promoting the Basic Plan for National Resilience. In the National Resilience Basic Plan, promoting the expansion of provisional two-lane sections of expressways to four lanes from the perspective of the core road network, as well as measures to prevent snowfall, such as snow melting facilities, snow sheds, snow fences, chain attachment/removal stations, and efficiency improvements are stipulated the plan also states promotion of the development of snow removal stations for efficient snow removal work, seismic reinforcement of road bridges, and measures to prevent landslides on roads, and the use of proceeds from the Bonds will contribute to solving these social issues.

<sup>4</sup>Land, Infrastructure, Transport and Tourism White Paper 2021(Japanese) <https://www.mlit.go.jp/hakusyo/mlit/r02/hakusho/r03/html/n1222000.html>

<sup>5</sup>Land, Infrastructure, Transport and Tourism White Paper 2021(Japanese) <https://www.mlit.go.jp/hakusyo/mlit/r02/hakusho/r03/html/n1222000.html>

Additionally, tunnels account for over 10% of the total length of roads managed by NEXCO CENTRAL. In the event of a disaster, there are concerns that the damage will spread because the area is surrounded by structures on all sides. NEXCO CENTRAL plans to prevent tunnel accidents from turning into serious accidents by enhancing evacuation pits and emergency equipment that can be used by victims in the event of a disaster occurring inside the tunnel.

---

**Use of proceeds 1: Repair projects (replacement of bridge supports, prevention of debris flow on slopes, installation/repair of snow and ice prevention facilities, seismic reinforcement work of bridges, etc.): 93 projects**

---

The proceeds will be used for repair projects (bridges, slopes, snow and ice countermeasures facilities, earthquake disaster countermeasures) to weaken the power of disasters and minimize damage. This use of funds falls under the category of "affordable basic infrastructure facilities" for expressway users in times of disaster under the "Social Bond Principles."

The proceeds will be used for projects to localize damage caused by natural disasters and other disasters, not for adapt to climate change. This project targets people who encounter disasters while using expressways. Regarding bridge repair projects, the target is support replacement, which involves replacing the components (supports) between bridge girders and piers to minimize damage in the event of an earthquake disaster. In parallel with countermeasures for deck deterioration, which is the use of funds for climate change adaptation, efforts are being made to replace bridges with newer, higher-performance bearings with the aim of minimizing damage to bridges during earthquakes.

Regarding slope repair projects, installation of protective fences, etc. will be covered. The purpose of installing protective fences is to prevent rocks from falling from the slope and debris flows, and to minimize damage in the event of earthquakes or rainfall disasters.

The repair project for snow and ice countermeasure facilities covers the installation and repair of snow melting facilities and other snow and ice countermeasure facilities. There are many areas within the NEXCO CENTRAL jurisdiction, mainly in the Hokuriku region, that are designated as heavy snowfall areas under the Act on Special Measures Concerning Countermeasures for Heavy Snowfall Areas. As a countermeasure against snow and ice in the winter, the Company equips snow removal and snow melting vehicles, but in addition, in areas where it is difficult to climb steep slopes due to snowfall, it has installed stationary snow melting equipment. By spraying the solution from the equipment, it aims to minimize snow and ice disasters.

Regarding repair work for earthquake disaster prevention, the target is seismic reinforcement work such as reinforcing bridge piers and installing bridge collapse prevention devices to strengthen the resistance of bridges. In order to strengthen the durability of the bridge, NEXCO CENTRAL is carrying out a repair project to make the bridge meet seismic performance 2 of the seismic performance specified in the Highway Bridge Specifications, a technical standard set by the Ministry of Land, Infrastructure, Transport and Tourism ("MLIT"). Seismic performance 2 means "performance to ensure that seismic damage is limited and that the bridge can quickly regain its functionality."<sup>6</sup>



---

**Use of Proceeds 2: Repair projects (updating and repairing various equipment such as road information boards, updating and repairing power receiving and distribution equipment to supply electricity to each equipment, updating and repairing transmission equipment to communicate with each equipment, etc. Renovation of management facilities, etc. to serve as disaster prevention bases): 90 projects**

---

The proceeds will be used for repair projects (electrical facilities, communication facilities, and architectural facilities) to protect users and prevent secondary disasters through prompt information transmission. This use of funds falls under the category of "affordable basic infrastructure facilities" for expressway users in times of disaster under the "Social Bond Principles."

The proceeds will be used to prevent secondary disasters by communicating information to users when a disaster occurs. Use of Funds 1 aims to minimize disasters, but if a disaster occurs, information will be promptly communicated to expressway users to prevent secondary disasters. Similar to Use of Funds 1, this project will also target people who encounter disasters while using expressways.

Repair projects related to electrical facilities include updating and repairing various equipment such as road information boards to promptly transmit information to expressway users in the event of a disaster, and power receiving and distribution equipment, private power generation equipment, etc. to supply electricity to various equipment such as road information boards. Road information boards are dotted along the expressway, and power receiving and distribution equipment and private power generation equipment are placed at each interchange, service area, parking area, etc. These repairs are intended to ensure that a system is in place to properly provide information to expressway users in the event of a power outage due to a disaster.

Repair work related to communication facilities involves updating and repairing transmission equipment for communicating with various equipment such as road information boards, and monitoring and control equipment at road control centers. The repair projects cover equipment that communicates with road information boards within the NEXCO CENTRAL jurisdiction, as well as equipment installed at four road control centers within the NEXCO CENTRAL jurisdiction (Nagoya, Kanazawa, Kawasaki, and Hachioji). In the event of a disaster, road information is transmitted through these facilities to alert expressway users.

Repair projects related to building facilities include new construction and renovation of management facilities that serve as disaster prevention bases in the event of a disaster. The NEXCO CENTRAL plans to utilize offices located in each region as comprehensive disaster prevention bases in the event of a disaster, and plans to carry out renovations to improve the disaster prevention functions of these facilities. By renovating management facilities that serve as disaster prevention bases, it aims to create a system that can continue operations in the event of a disaster, and to communicate information to users and respond to evacuations.

---

**Use of proceeds 3: Repair projects (installation of evacuation shafts in tunnels, reinforcement, renewal, and repair of ventilation equipment and emergency equipment, etc.): 4 projects**

---

The proceeds will be used for repair projects (tunnel disaster prevention and tunnel facilities) to safely evacuate users involved in disasters. This use of funds falls under the category of "affordable basic infrastructure facilities" for expressway users in times of disaster under the "Social Bond Principles."

The projects target disaster prevention measures in tunnels as the use of funds. It is intended to cover users of expressway tunnels in the event of a disaster.

Repair projects related to tunnel disaster prevention include the installation of evacuation shafts for safe evacuation of expressway users in the event of a tunnel disaster, reinforcement of tunnel ventilation equipment, and emergency equipment. There are 441 tunnels within the NEXCO CENTRAL jurisdiction, and in the "Road Tunnel Emergency Facility Installation Standards" revised by the MLIT in 2019, the standard distance for evacuation shaft installation, which had been divided depending on the transportation method, was unified into a shorter distance standard. In accordance with the revised installation standards, NEXCO CENTRAL is upgrading ventilation facilities in tunnels with long tunnels and heavy traffic, to function as smoke ventilation facilities in the event of a disaster. Emergency facilities are also planned to be enhanced in accordance with the revised standards.<sup>7</sup>

The repair projects for tunnel facilities are scheduled to include updating and repairing existing tunnel ventilation equipment and emergency equipment, and these are intended to provide a safer infrastructure for expressway tunnel users in the event of a disaster.

---

#### **Use of proceeds 4: Construction work to convert a tentative two-lane (one lane on each side) section to four lanes (two lanes on each side): 32 projects**

---

The proceeds will be used for a four-lane project that will benefit local residents by preventing expressway blockages in the event of a natural disaster and enabling prompt road restoration (limited to projects that contribute to widening existing roads and maintaining redundancy of road functions).

JCR has determined that this use of funds falls under the category of "affordable basic infrastructure facilities" for expressway users and local residents around expressways in times of disaster, and that it has a social aspect.

The proceeds will be used to expand the expressways, which are currently operated with two tentative lanes, to four lanes. The funds will be used only for projects that reduce the risk of road blockage by increasing the number of lanes to four lanes, and is expected to have the social benefit of encouraging the early resumption of traffic in areas isolated by disasters by improving the resilience of expressways.

Approximately 40% of high-standard highways in Japan have three lanes or less, which is extremely high compared to other countries. In particular, tentative two lanes are often adopted on roads where not much traffic is expected when they are initially put into service, but in many cases the median is partitioned with rubber poles, etc., and the accident rate is higher compared to 4-lane sections. In addition, in the event of a disaster such as an earthquake or heavy rain, it is necessary to close the road for restoration work, and in addition to the road becoming narrow during heavy snowfall, it is also necessary to close the road to remove snow from the roadside. It has been pointed out that these will cause major traffic problems. The National Highways Subcommittee of the MLIT has announced the "Basic Policy (Vision) for Wide Area Road Networks," and one of the policies includes the promotion of multi-lane roads and the securing of alternative routes to avoid isolation of regions and disruption of access routes to disaster prevention bases such as medical institutions from the perspective of alternative functions in the event of a disaster in the Chubu and Hokuriku blocks, where the NEXCO CENTRAL is located.<sup>8</sup>

The expressways managed and owned by NEXCO CENTRAL fall under the category of high-standard roads in the wide-area road network, and the MLIT has selected priority development sections for four-lane construction (880km, of which approximately 100km is the NEXCO CENTRAL section) for

---

<sup>7</sup>Regarding revision of road tunnel emergency facility installation standards(Japanese)  
<https://www.mlit.go.jp/road/sign/kijyun/pdf/tonnneruhijou.pdf>

<sup>8</sup>Ministry of Land, Infrastructure, Transport and Tourism 54th National Highway Subcommittee(Japanese)  
[https://www.mlit.go.jp/policy/shingikai/road01\\_sg\\_000622.html](https://www.mlit.go.jp/policy/shingikai/road01_sg_000622.html)

high-standard roads (tolls) for the purpose of national resilience, and work is being carried out in stages.

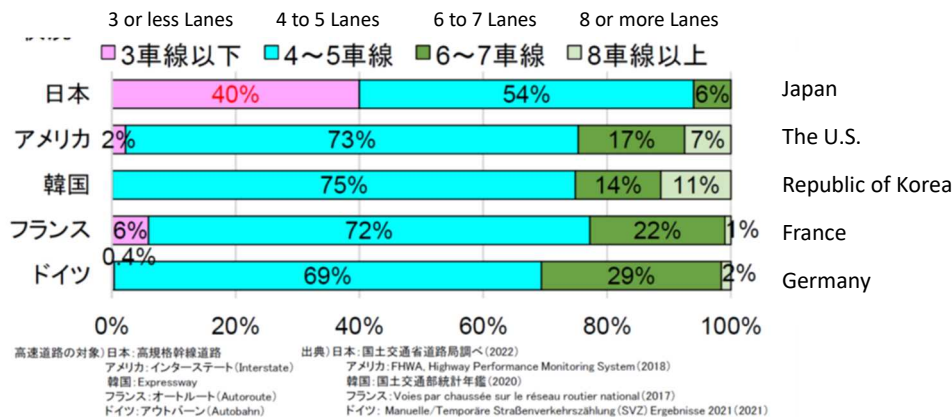


Figure 3: Lane distribution in each country's expressway network<sup>9</sup>

By converting a provisional two-lane road to four lanes, it is expected to reduce the number of traffic disruptions in the area due to vehicle closures in the event of a disaster. NEXCO CENTRAL Company has announced that the number of road closures due to disasters has decreased in the section where the provisional two-lane road has been converted to four lanes.<sup>10</sup>

The use of the funds does not include sections that simply need to be widened to four lanes due to increased traffic volume, but rather sections that will contribute to the early resumption of traffic in areas isolated by the disaster by improving highway resilience.

### 3. Negative Impacts on the Environment and Society

#### This framework regarding negative impacts on the environment and society (excerpt)

Negative impacts of projects on the environment and society and how to deal with them

(Foregoing omitted)

#### 2. Responses to Risk Mitigation

##### (1) Impacts of land development on the ecosystem

- Conduct environmental impact assessments in all expressway construction projects (by the national government or target prefectures)
- Perform environmental research, such as soil or hydrological surveys for construction and determine road structures so as not to affect living of local communities after figuring out the topography, geology or groundwater conditions

<sup>9</sup>Ministry of Land, Infrastructure, Transport and Tourism 53rd National Highway Subcommittee Handout 5 (Japanese)  
<https://www.mlit.go.jp/policy/shingikai/content/001587621.pdf>

<sup>10</sup>Central Nippon Expressway website(Japanese)  
<https://www.c-nexco.co.jp/images/news/4767/2e2a4b3e16a16283802ce291d72abf2f.pdf>

- In areas with rich natural environments, collect seeds from trees that have been grown naturally in local areas, cultivate and utilize them as "local seedlings" for greening expressway surfaces or other areas.
- Recycle and reuse construction by-products, such as construction generated soil, asphalt or concrete lumps, and use those, which cannot be reused or recycled, as recycled resources as much as possible
- Take measures against noise or air pollution in accordance with the gist of the Basic Environmental Law and the Noise Regulation Law

\* Noise measures: Establish noise barrier walls or environment facility zones based on noise forecasts before construction and measurement results after construction, requests from local governments in areas along roads and locational conditions  
Air Pollution Countermeasures: growing trees on slopes or measures against traffic congestion

(2) Traffic congestion caused by traffic or lane regulations

- In case of large-scale lane regulations, disseminate the regulations to users via its website or public relations in advance to alleviate traffic congestion.
- Reduce traffic influence due to construction by implementing work on only one side of the road according to the two-way traffic regulation.

(3) Safety risk of construction workers

- The Company's management philosophy is to prioritize on safety, and it has determined "five initiative policies" for improving safety as a concrete initiative policy for "continuous efforts to improve safety," one of its management policies.

1. Foster a corporate culture that gives first priority to safety

2. Promote safety activities

3. Develop human resources that support safety

4. Continuously improve operational processes in response to aging deterioration or potential risks in road structures

5. Promote steady and efficient projects to improve safety

- Implement initiatives for safe and efficient construction or work with the contractors and Group companies based on the above.

• Annually report the implementation of initiatives based on the "five initiative policies" at the Safety Improvement Expert Meeting composed of external experts.

(Omitted)

Regarding the NEXCO CENTRAL, most of the eligible projects covered by this framework only involve renovation work on existing expressways and do not include large-scale civil engineering works, so they do not have a large negative impact on the environment or society. Furthermore, the four-lane construction work is targeting sections that have already been opened with provisional two lanes, and most of these roads are currently undergoing land acquisition and construction in preparation for the future four-lane expansion. However, while some earthwork structures such as tunnels will require large-scale construction, excavation will not be carried out as they will not be used during the provisional two-lane road, and construction will be carried out in conjunction with the four-lane construction. NEXCO CENTRAL has stipulated that the above-mentioned construction work will be conducted through procedures stipulated by laws and ordinances, such as environmental impact assessments, to confirm the negative impact on the environment and the company, and to take measures to reduce it. Through interviews with NEXCO CENTRAL and confirmation of related materials, JCR confirmed that it has a system in place to take appropriate countermeasures.

#### 4. Consistency with SDGs

##### (1) Consistency with ICMA's SDGs mapping

Project subject to the use of proceeds are evaluated to contribute to the following SDGs and targets in light of the SDGs mapping of ICMA.



#### Goal 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.6. By 2020, halve the number of global deaths and injuries from road traffic accidents



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

Target 9.1. Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.





#### Goal 13: Take urgent action to combat climate change and its impacts

Target 13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

##### (2) Consistency with SDGs Action Plans and Social Bond Guidelines

JCR has confirmed that the projects for which the funds are to be used are consistent with the following items among the "social issues based on the SDGs Action Plan, etc." as exemplified in the Social Bond Guidelines by the Financial Services Agency.

Social issues based on SDGs action plans, etc.: Sustainable and resilient national land		
Target people: Expressway users and local residents near expressways during disasters		target
Construction of facilities with disaster prevention and mitigation measures, Disaster vulnerability/infrastructure aging countermeasures project	Affordable basic infrastructure facilities	 

Social issues based on SDGs action plans, etc.: Sustainable and resilient national land	
Target people: Expressway users and local residents near expressways during disasters	target

## I. Selection Standards and Processes for Use of Proceeds

### JCR's Key Consideration on This Factor

In this section, JCR confirms the objectives to be achieved through social financing, the appropriateness of social project selection standards and the processes, and whether a series of processes are properly disclosed to investors/lenders and others.

### ▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR has assessed that departments and management with specialized knowledge are appropriately involved in the goals of the Bonds, the criteria for selecting eligible projects, and the process, and that transparency is ensured.

## 1. Goals

### This framework related to goals (excerpt)

Investment policy based on long-term vision

NEXCO CENTRAL has managed roughly 2,100km of expressways, including TOMEI EXPWY, MEISHIN EXPWY and CHUO EXPWY. TOMEI EXPWY and MEISHIN EXPWY have been aging, with 50 years or more from the opening of all routes, and approximately 60 percent of all routes have been in service for 30 years or more and roughly 30 percent of all routes have been in service for 50 years or more. In order to continue to fulfill its role as significant routes that support people's living or the economy, the Company is required to early work on large-scale renewal and repair projects.

In recent years, the social environment has been changing rapidly, with frequent and severe natural disasters, a falling birthrate, an increase in aging population, a rapid decline in working population and rapid technological innovation in the ICT sector. As a business concern, how to contribute to developing a sustainable society has been tested. The Group has been continuing to take on the challenge, aiming higher by working to solve social issues such as improving expressway networks, taking measures against aging through renewal projects, taking resilience measures through anti-seismic reinforcement on bridges, developing technology with ICT or resolving social issues such as regional revitalization.

(snip)

In December 2013, the government promulgated the "basic act for national resilience contributing to preventing and mitigating disasters to achieve strong and flexible people's living," based on which it formulated the "basic act for national resilience" or "five-year acceleration measures for disaster prevention and mitigation and national resilience" to promote the development of a disaster-resistant nation. Of these, the national government is required to ensure functionalities of national arterial roads and take measures against aging including proper reinforcement for traffic infrastructure.

The "MLIT Action Plans for Life Extension of Infrastructure FY 2021-FY 2027" formulated by the MLIT in September 2019 clearly states that it is increasingly important to adequately maintain infrastructure during normal times in order for the infrastructure developed to exert significant effects as disaster prevention and to realize sustainable infrastructure maintenance so that the infrastructure functions can be appropriately exercised in the future.

Promoting disaster prevention and aging measures for expressways by implementing target projects for which proceeds through social bond proceeds will be used in this framework is in line with the government's policy on disaster prevention/mitigation and national resilience and contribute to the development of high-quality infrastructure with sustainable and national resilience.

With regard to the use of social bond funds, JCR has confirmed that NEXCO CENTRAL is in compliance with the following: MLIT's climate change adaptation plan, "Recommendations from Technical Review Committee on Long-Term Preservation and Renewal of Expressway Assets (January 22, 2014)," which was established to strengthen against the aging of expressways, "Large-Scale Renewal and Large-Scale Repair of Highway Managed by NEXCO East/Central/West, (January 22, 2014)," "MLIT's Action Plans for Life Extension of Infrastructure for FY2021-FY2025 (June 18, 2021)," "NEXCO Central Infrastructure Life Extension Plan (Action Plan) for FY2021 to FY2025 (December 2021)," "NEXCO Central Individual Facility Plan (Road Facilities) (December 2022)," "Maintenance Inspection Guidelines (April 2023)," "Facility Maintenance Management Guidelines (April 2023)," "Basic Plan for Safety and Security on Expressways (September 10, 2019)," "Implementation Plan for Safety and Security on Expressways," (December 20, 2019)," "Agreement on Expressway and National Route Chuo Expressway Fujiyoshida Line, etc.," "Technical Standards for Pavement Structures" (Kokutogai No. 48, National Highway Plan No. 55, June 29, 2001). JCR has confirmed that various measures has been steadily implemented in accordance with the "NEXCO Central Design Guidelines" (June 29, 2001).

Based on the above, JCR evaluates that the projects for which the proceeds of the Bonds will be used are consistent with the transportation infrastructure plans of the MLIT and the strategy of NEXCO CENTRAL.

## 2. Selection criteria

JCR evaluates that the eligibility criteria for the Bonds are targeted at projects with high social benefits, as confirmed in Evaluation Phase 1. Additionally, JCR confirmed that all of the projects covered by the Bonds meet the selection criteria.

## 3. Process

The selection process and parties involved in the selection of NEXCO CENTRAL projects are in accordance with the legal provisions, and involves not only NEXCO CENTRAL but also third parties, making the selection process highly transparent.

Based on the above, JCR evaluates that NEXCO CENTRAL's goals, selection criteria, and process for the Bonds are appropriately structured. In addition, when issuing social bonds, NEXCO CENTRAL plans to disclose these standards and processes to investors using the Shelf Registration Supplemental Prospectus, Final Terms, or Offering Circular as the main documents, ensuring transparency.



## II. Management of Proceeds

### JCR's Key Consideration on This Factor

It is usually assumed that management methods of proceeds vary widely depending on issuers/borrowers. JCR confirms whether the proceeds are surely appropriated to the social project and whether a mechanism and an internal system are in place to make tracking easy.

JCR also focuses on whether the proceeds are scheduled to be used for social projects at an early stage and the management and operation methods for unallocated proceeds.

### ▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR evaluates the fund management system of NEXCO CENTRAL as highly transparent, as it has been appropriately constructed and the method of managing procured funds is disclosed in this evaluation report.

The proceeds from the Bonds will be used for the following: bridge support replacement in repair projects, debris flow prevention measures on slopes, installation and repair of snow and ice countermeasure facilities, seismic reinforcement work for bridges, renewal and repair of various facilities such as road information boards, renewal and repair of power receiving and distribution equipment to supply electricity to each equipment, renewal and repair of transmission equipment to communicate with each equipment, renovation of management facilities that serve as disaster prevention bases, etc. The use of funds includes new investments or refinancing for installation, reinforcement, renewal, and repair of evacuation shafts in tunnels, reinforcement, renewal, and repair of ventilation equipment and emergency equipment, and construction work to convert a tentative 2-lane (1 lane on each side) section to 4 lanes (2 lanes on each side). There are no plans to use the funds for any other purposes. The ratio of new investment to refinancing is expected to be approximately 1:9.

NEXCO CENTRAL clearly distinguishes the use of social bonds from other uses of funds by managing the funds raised in a dedicated account. After depositing money into the dedicated account, the funds are transferred to the general account after examining the cumulative amount of construction costs and other expenditures for each project, and the semiannual construction output of the target project is extracted from the asset system to monitor progress, and a strict tracking management system is in place. In addition, the internal control system has been appropriately established, as the management of the inflow and outflow of procured funds is carried out by the finance section manager, who is in charge of cash receipts and disbursements, and the audit firm is scheduled to complete the review of semiannual settlement of accounts.

Based on the above, JCR evaluates that NEXCO CENTRAL has established a strict financial management system and internal control system.

### III. Reporting

#### JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the disclosure system for investors/lenders is planned in detail and in an effective manner before and after the issuance of the social bonds/loan.

#### ▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR evaluates the reporting of the NEXCO CENTRAL as a plan in which both the allocation status of funds and the benefits provided to beneficiaries are appropriately disclosed to investors and others.

#### Reporting on appropriation of proceeds

The use of proceeds from the Bonds will be disclosed to investors on the NEXCO CENTRAL's website, JCR's evaluation report, etc. In addition to the method of disclosing the status of appropriations and the methods of managing the unappropriated funds, if there is a need to re-appropriate the funds due to cancellation or other reasons of the project before the redemption of the Bonds, NEXCO CENTRAL plans to disclose it on its website until the entire amount is allocated to other eligible projects.

#### Reporting on social benefits

NEXCO CENTRAL plans to disclose the social benefits of the Bonds annually on its website.

In reporting on social benefits, in addition to an overview of the target repair project, outputs and outcomes are shown, and the contents described in the goals are reported as impacts. Furthermore, as quantitative information will be disclosed as much as possible. Therefore, it will be sufficient to demonstrate the social significance of the target project.

Based on the above, JCR evaluates that the reporting system by NEXCO CENTRAL is appropriate.

## IV. Organization's Sustainability Initiatives

### JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the management of the issuer/borrower positions sustainability issues as a high priority for management and whether the sustainability policy, process and selection criteria for social projects are clearly positioned through the establishment of a department dedicated to the promotion of sustainability, including social issues, or in collaboration with external organizations.

#### ▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR highly evaluates NEXCO CENTRAL for the fact that it positions sustainability issues as important management issues and implements various initiatives together with various stakeholders under the strong initiative of the management, and for the fact that it has a department and personnel specializing in environmental and occupational safety aspects of expressways and is involved in the implementation of eligible projects from their professional knowledge and expertise.

The NEXCO CENTRAL Group has set four management policies in its medium-term management plan, "Management Plan Challenge V 2021-2025."



Figure 4: Management policy of Central Japan Expressway<sup>11</sup>

In accordance with these four management policies, NEXCO CENTRAL has promoted its efforts with "Steady maintenance for accelerating aging infrastructure" and "Response to more severe and more

<sup>11</sup>NEXCO Central Japan Report 2023 (Japanese)  
[https://www.c-nexco.co.jp/corporate/csr/csr\\_download/documents/2023/nexcocsr23\\_2\\_all.pdf](https://www.c-nexco.co.jp/corporate/csr/csr_download/documents/2023/nexcocsr23_2_all.pdf)

frequent natural disasters" as major measures in response to climate change adaptation and disasters such as earthquakes for which proceeds in this framework will be used.

The Company has listed "Taking on challenges to create new value adapting to environmental changes, such as digitalization and decarbonization" as the third item in the aforementioned management policies. JCR has confirmed that the item was included in the management policies with the following reasons: (1) the Japanese government set forth its policies to realize a digital society or a carbon-free society in 2020, (2) the government has recognized it is urgent to deal with the "utilization of accelerating digital technologies" and "environmental conservation to realize a carbon-free society," which is looking ahead to future changes as management issues assumed hereafter and (3) some employees in the Company made remarks that "it needs to advance projects for expressways or introduce IoT."

The Company has expressed that it has improved its statements on the environmental efforts, such as "renewable energy efforts" or "replacement of the conventional lighting apparatus with high-efficiency ones such as LED" in the "contribution to the preservation of the local environment and decarbonization" of the "taking on the challenge to create new value adapting to environmental changes, such as digitalization or decarbonization" in the "Management Plan Challenge V 2021-2025," and NEXCO CENTRAL has expressed that it has seriously regarded the environmental issues to investors. In addition to these efforts, the Company has reinforced its environmental initiatives, such as its joint efforts with Chubu Electric Power Co., Inc. to improve its snow-melting system on the sidewalks in expressways' parking areas by directly sending the heat from heating in buildings developed by HOKUSUI SEKKEI CONSUL. Co., Ltd. to space installed under roads.

NEXCO CENTRAL sought opinions from external experts and reflected them in working out the overall structure or major policy proposals in formulating the "Management Plan Challenge V 2021-2025." These external experts have expressed their opinions on "national resilience," "new value creation," "carbon neutrality" and "fostering the next generation," and NEXCO CENTRAL formulated its management plan while referring to them.

NEXCO CENTRAL has operated its environmental management system with the ISO14001 certification. The Company's CEO has given instructions on the environmental management plan for the new fiscal year in management review, encouraging the top of the Company to manage the environment. Plans for the new fiscal year have been reported at the management meeting and have been disseminated as its policy.

Environment and Technical Planning Division is in charge of making environmental impact assessment or determining policies on environmental measures for environmental issues. Comprehensive Safety Promotion Division, a specialized department, has comprehensively managed safety including occupational safety.

Accordingly, JCR has confirmed that NEXCO CENTRAL has implemented various initiatives with multi-stakeholders under the strong initiative of the management. JCR has also confirmed that the Company has had specialized departments and human resources from the perspective of both the environmental and occupational safety of expressways and has been involved in the implementation of eligible projects based on their specialized insight.

## Evaluation Phase 3: Evaluation result(Conclusion)

## Social1

Based on its JCR Social Finance Evaluation Methodology, JCR assigned "s1" for the "Socialness Evaluation (use of proceeds)" and "m1" for the "Management, Operation and Transparency Evaluation." As a result, JCR assigned "Social 1" for "JCR Social Bond Evaluation." The Bonds meet the standards for the items required in the Social Bond Principles and the Social Bond Guidelines and are consistent with concrete measures for SDGs Goals and the governmental SDGs Goals.

		Management, operation, and transparency evaluation				
		m1	m2	m3	m4	m5
Social Evaluation	s1	Social 1	Social 2	Social 3	Social 4	Social5
	s2	Social 2	Social 2	Social 3	Social 4	Social5
	s3	Social 3	Social 3	Social 4	Social 5	Not qualified
	s4	Social 4	Social 4	Social 5	Not qualified	Not qualified
	s5	Social 5	Social 5	Not qualified	Not qualified	Not qualified

(Responsible analysts for this evaluation) Atsuko Kajiwara, Kosuke Kajiwara

---

## Important explanations of this Evaluation

---

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

JCR Social Finance Evaluation, which is determined and provided by Japan Credit Rating Agency, Ltd. (JCR), is an expression of JCR's comprehensive opinion at this time on the extent to which the funds procured from the issuance of social bonds or the execution of social loan (social bonds and social loans are collectively called "social finance"), which are the subject of the evaluation, are allocated to social projects defined by JCR and the extent to which the management, operation and transparency of the use of social finance are ensured. It does not fully indicate the extent to which the funds procured from such social finance are allocated and the management, operation and transparency of the use of the funds are ensured.

JCR Social Finance Evaluation assesses the plan or status of the appropriation of funds at the time of the planned social finance procurement or at the time of procurement and it does not guarantee the status of the appropriation of funds in the future. Furthermore, it does not prove the social benefits of social finance and is not responsible for their social benefits. JCR confirms the social benefits of social finance 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 Social 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 Social Finance 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 Social Finance 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.

---

#### ■ Matters of Attention

The information contained in this document was obtained by JCR from the issuer/borrower and from accurate and reliable sources; however, such information may be mistaken for human and/mechanical errors or other reasons. Therefore, JCR makes no representation or warranty, whether express or implied, as to the accuracy, result, appropriateness, timeliness, completeness, marketability or fittingness for any particular purpose of such information, and assumes no responsibility for any errors, omissions or consequences of using such information. JCR shall not be liable for any loss of opportunity and extraordinary, indirect, incidental or consequential damages of any kind, including any loss of money, which may result from any use of such information under any circumstances, whether contractual liability, tort liability, negligence or other causes of liability, and whether or not such damages are foreseeable or unforeseeable. JCR Social Finance Evaluation does not express any opinion on various risks (credit risk, price fluctuation risk, market liquidity risk, price fluctuation risk, etc.) related to Social Finance, which is the target of the evaluation. Furthermore, it is an expression of JCR's opinion at the present time and does not represent facts nor does it make any recommendation regarding risk assessment or decisions on the purchase, sale or holding of individual bonds, commercial paper, etc. JCR Social Finance Evaluation may be modified, suspended or withdrawn due to changes in information, lack of information or other reasons. All rights pertaining to this document, including data from JCR Social Finance Evaluation, are held by JCR. All or part of this document, including data from JCR Social Finance Evaluation, is prohibited from being reproduced, modified or otherwise altered without the permission of JCR.

#### ■ Glossary

JCR Social Finance Evaluation: This evaluates the extent to which the funds procured from the social bonds are allocated to social projects as defined by JCR, and the degree to which the management, operation and transparency of the social bonds are ensured. Evaluations based on a 5-point scale are given from top to bottom using the Social 1, Social 2, Social 3, Social 4, and Social 5 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>).

#### ■ For further information, contact

Information Service Dept. TEL: 03-3544-7013 FAX: 03-3544-7026

#### Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan  
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

Copyright © Japan Credit Rating Agency, Ltd. All rights reserved.