

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

Japan Credit Rating Agency, Ltd. (JCR) announces the following annual review of Green Bond Evaluations.

JCR Reviewed NEXCO Central Company Limited 16th U.S. Dollar-denominated Corporate Bonds (Climate Resilience Bonds)

Issuer	: NEXCO Central Company Limited
Subject	: NEXCO Central Co., Ltd. 16th U.S. Dollar-Denominated Corporate Bonds (Green Bond, Climate Resilience)
Type	: Bonds
Issue amount	: USD 400 million
Interest rate	: 0.894%
Date of Issuance	: December 10, 2020
Redemption Date	: December 10, 2025
Method of Redemption	: Bullet redemption
Use of proceeds	: Projects that contribute to adaptation to climate change

<Green Bond Evaluation Review Results>

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

1. Overview

On November 26, 2020, JCR released the Comprehensive Assessment "Green 1" for the 16th US Dollar Bond (the Bonds) issued by NEXCO Central Company Limited for projects for climate change adaptation. The outline is as follows.

(excerpt from the evaluation report on November 26, 2020)

NEXCO Central Co., Ltd. (NEXCO Central) is a special company wholly owned by the government. Its business base covers relatively heavy traffic routes from the Tokyo metropolitan area to Chubu and Kinki areas including the Tomei Expressway, Chuo Expressway and Shin-Tomei Expressway among the national expressway network, etc. formerly held by Japan Highway Public Corporation. NEXCO Central is primarily engaged in construction, operation and maintenance, etc. of expressways, as well as management and operations of rest areas providing services and parking

lots. In line with the basic policy of group management, NEXCO Central has been grouping associated companies. They are 27 subsidiaries and 9 related companies as of March 2020.

NEXCO Central Group identifies "control of global warming and consideration for the local environment" as one of the material themes in its CSR activity. Reflecting this CSR materiality in its management plan, NEXCO Central stipulates environmental policy. Measures in accordance with this policy include "control of global warming," "enhancing 3R (Reduce, Reuse and Recycling) of resources," and "consideration for the local environment." Management Plan Challenge V (Five) 2016-2020, the current management plan, reflects the materiality of the above CSR activities in business activities and has the following four management policies.

Management Policy 1: Continuous Efforts to Improve the Safety of Expressways and Strengthen Their Functions

Management Policy 2: Enhancement of Technology Development to Improve Safety and Comfort

Management Policy 3: Contributing to regional revitalization in view of social and economic changes

Management Policy 4: Strengthening the Management Foundation to Continue Responding to Social Needs

NEXCO Central established the Green Bond Framework (the Framework) to issue the Green Bond as a funding source to address climate change adaptation projects. This report aims to evaluate the 16th U.S. dollar-denominated bond (the Bonds) scheduled to be issued by NEXCO Central in line with this framework. NEXCO Central plans to use the proceeds of the Bonds for new investments in the following projects:

- (1) Expressway Renewal Project (28 bridges)
- (2) Expressway Renewal Project (Five Sections of earth work structures (slope reinforcement))
- (3) Porous Asphalt Pavement on New Expressways (Five Sections)

JCR confirmed that the eligibility criteria established by NEXCO Central adequately examined the risks assumed by the long-term forecasts of global warming by the end of the 21st century based on the assumption of RCP8.5, and that eligible projects have appropriate effects for the assumed risks. In addition, the projects selected according to the applicable eligibility criteria are expected to contribute to the "development of a safe and reliable road network," which is a climate change adaptation measure for transportation infrastructures specified by the Ministry of Land, Infrastructure and Transport for roads. NEXCO Central prepares the project selection process, system of the management of proceeds, and the post-issuance reporting appropriately. JCR evaluates those systems are well designed and keep high transparency.

(Excerpt ends)

JCR confirmed the status of the above specified renewal and other construction projects and the status of appropriation of funds, which are the uses of proceeds for the Bonds, and confirmed that proceeds have been appropriated for the originally planned projects and that the unappropriated funds have been also properly managed. JCR also confirms that there is no change in the system for managing and operating the funds raised by the Bonds.

In the "Management Plan Challenge V 2021-2025," a new medium-term management plan, JCR confirmed that NEXCO Central is strengthening its environmental initiatives and implementing various new initiatives together with external experts and cooperating companies.

As a result, 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 result of the Bonds. Detailed Evaluation is discussed in the next chapter.

The Bonds are considered to meet the standards for items required in the "Green Bond Principles"¹ and the "Green Bond Guidelines 2020" issued by the Ministry of the Environment.²

¹ ICMA(International Capital Market Association) Green Bond Principles 2018 Version
<https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

² Ministry of the Environment Green Bond Guidelines 2020 <https://www.env.go.jp/press/files/jp/113511.pdf>

2. Post-issuance review items

In this section, JCR describes the items to be confirmed in the post-issuance review. The review focuses on items whose content has changed compared with the previous evaluation periods.

(1) Use of Proceeds (Status of Appropriation)

JCR evaluates if the management of funds procured by the Bonds and the appropriation of funds procured for green projects have been properly carried out in a manner specified by the issuer at the time of assigning the Green Bond Evaluation.

(2) Appropriateness and Transparency Concerning Selection Standard and Processes of the use of Proceeds

JCR evaluates whether or not there are any changes to the objectives to be achieved through the Bonds, the criteria for selecting green projects, the adequacy of the process, and the series of processes to be implemented.

(3) Appropriateness and Transparency of Management of the Proceeds

JCR evaluates whether the proceeds have been certainly allocated for green projects or not. JCR also evaluates whether there is a system and internal system in which the allocation status can be easily tracked and managed.

(4) Reporting

JCR evaluates if the environmental improvement effects resulting from the green project financed by the funds procured by the Bonds are appropriately calculated according to the method stipulated by the issuer at the time of assigning the Green Bond Evaluation.

(5) Organization's Environmental Initiatives

JCR evaluates if the issuer's management continues regarding environmental issues as a high priority issue.

3. Contents of Review

(1) Use of Proceeds (Status of Appropriation)

- a. As of the end of November 2021, the funds raised by NEXCO Central through the Bonds had been appropriated for the following projects. The following details are based on the Green Bond Reporting Materials published in July 2021 and the recent development are based on the content submitted by NEXCO Central.

(Contents of Reporting)

Project	Number of Projects	Allocation Amount (Unallocated amount)	Output	Outcome
Expressway Renewal Projects on Bridges	9	JPY 36,716 million	3.9km	Soundness of the bridge (Restored to original condition)
Expressway Renewal Projects on Earthworks Structures (slopes)	1	JPY 77 million	1.0km	Soundness of the slope (Prolonging product life)
Expressway Renewal Projects on Earthworks Structures (drainage)	2	JPY 483 million	4.6km	Improving drainage capacity (About 2 to 4 times)
High-Performance Pavement	-	-	-	Amount of stored water and water flow per hour (8mm/h)
Total	12	JPY 37,278 million (JPY 451 million)		

(Overview of the Project)

Eligible Business	Project Description	Area
Expressway Renewal Project on Bridge	Chuo Expressway - floor slab replacement work	Gifu Prefecture
Expressway Renewal Project on Bridge	Chuo Expressway - bridge repair work	Gifu Prefecture
Expressway Renewal Project on Bridge	Meishin Expressway - bridge repair work	Shiga Prefecture
Expressway Renewal Project on Bridge	Meishin Expressway - floor slab replacement work	Gifu Prefecture
Expressway Renewal Project on Bridge	Hokuriku Expressway - earthwork structure renewal work	Toyama Prefecture
Expressway Renewal Project on Bridge	Hokuriku Expressway - floor slab replacement work	Fukui Prefecture

Expressway Renewal Project on Bridge	Hokuriku Expressway - floor slab replacement work (i)	Toyama Prefecture
Expressway Renewal Project on Bridge	Hokuriku Expressway - floor slab replacement work (ii)	Toyama Prefecture
Expressway Renewal Project on Bridge	Hokuriku Expressway - floor slab replacement work	Ishikawa Prefecture
Expressway Renewal Project on Earthworks Structures (slope)	Tomei Expressway - slope reinforcement work	Shizuoka Prefecture
Expressway Renewal Project on Earthworks Structures (drainage)	Chuo Expressway - slope drainage grooves renewal work	Yamanashi Prefecture
Expressway Renewal Project on Earthworks Structures (drainage)	Hokuriku Expressway - slope drainage grooves renewal work	Ishikawa Prefecture

(Source: NEXCO Central Green Bond Reporting and Submitted Materials)

- b. JCR confirms that there is no negative impact on the environment when implementing the above-mentioned target construction.

(2) Appropriateness and Transparency Concerning Selection Standard and Processes of the use of Proceeds

At the time of the initial evaluation, JCR evaluates the standards for selecting the use of proceeds and the process are appropriate. In the current review, JCR confirmed with NEXCO Central that there was no change from the initial evaluation.

(3) Appropriateness and Transparency of Management of the Proceeds

JCR evaluates proceeds management as appropriate at the time of initial evaluation. Regarding that, JCR confirmed that management has been carried out in accordance with the method that was initially evaluated, and that unappropriated proceeds have been managed in a dedicated account for green bonds on NEXCO Central. Based on the above, JCR has evaluated the appropriateness and transparency of proceeds management as appropriate.

(4) Reporting

a. Reporting on the status of appropriation of proceeds

NEXCO Central discloses the status of appropriation of funds as described in (1) above, and JCR confirms that the disclosure content is appropriate.

b. Reporting on the Environmental Improvements

With regard to the environmental improvement effect, the content of the output indicator and the outcome index described in the framework of NEXCO Central are disclosed and JCR evaluated it as appropriate.

(5) Organizational Environmental Initiatives

The NEXCO Central Group formulated the "Management Plan Challenge V 2021-2025," the next medium-term management plan of the "Management Plan Challenge V 2016-2020," which is a medium-term management plan. Based on the review of the previous medium-term management plan, the Group set forth four management policies.

NEXCO Central's Management Policy
1. Deepening our constant efforts to improve safety
2. Strengthening the functions of expressways and evolving them into spaces widely used by customers
3. Trying to create new value by adapting to environmental changes such as digitalization and decarbonization
4. Strengthening our management base to continue to meet our customers' and other stakeholders' expectations

(Source: NEXCO Central Website)

In accordance with these four management policies, the main measures of NEXCO Central are "steady maintenance for accelerating aging infrastructure" and "response to severe and frequent natural disasters" as responses to climate change adaptation, which are the uses of the Bonds' funds, and they are promoting their efforts.

The third management policy is to take on the "Trying to create new value by adapting to environmental changes such as digitalization and decarbonization." JCR confirmed that this item was included in the management policy because the Japanese government had set a policy aimed at realizing a digital society and a carbon-free society in 2020 and NEXCO Central recognized the urgent need to respond to "accelerating use of digital technologies" and "environmental conservation to realize a carbon-free society" in anticipation of future changes, as anticipated management issues, as well as there were opinions from within the Company such as "We have to upgrade the expressway business and introduce IoT."

In the "Management Plan Challenge V 2021-2025" the Company expressed to the stakeholders that it is placing emphasis on environmental issues by enhancing the descriptions on environmental initiatives, including "Renewable Energy Initiatives" and "Replacement with High-Efficiency Light (LEDs)" in "Contributing to the Global Environmental Conservation and Decarbonization" in the "Trying to create new value by adapting to environmental changes such as digitalization and decarbonization." In addition to the above, it is also jointly working with Chubu Electric Power Co., Inc. to improve the snow-melting system in the sidewalks of expressway parking areas by sending heat emitting from building directly to a space installed under the road surface developed by Hokusui Sekkei Consul Co., Ltd. It is also strengthening environmental initiatives, such as reducing CO₂ emissions by easing traffic congestion through the distribution of "AI Traffic Congestion Prediction" information using past traffic congestion results and regulatory information jointly developed by NTT DOCOMO and NEXCO Central.

When formulating the "Management Plan Challenge V 2021-2025," NEXCO Central consulted with external experts and reflects their views on the overall composition and the preparation of principal policy proposals. Those external

experts expressed their opinions on "resilience of national land," "creation of new value," "carbon neutrality" and "next generation rearing." NEXCO Central formulated the management plan with reference to them as well.

NEXCO Central endorses the ten principles advocated by the United Nations Global Compact in the four areas that are human rights, labor, the environment and anti-corruption, and has been participating in the Global Compact Network Japan (GCNJ) since July 2008. It is also actively committed to external initiatives.

NEXCO Central operates an environmental management system certified under ISO 14001. In addition, the CEO gives instructions on the plans for environmental management for the new fiscal year in the management review, and the top management promotes environmental management. Plans for the new fiscal year are reported to the Management Committee and disseminated as the Company's plans.

With regard to environmental issues, the Environmental & Technology Planning Department is responsible for implementing environmental impact assessments and deciding policies related to environmental measures. In addition, it has a specialized department called the Comprehensive Safety Promotion Department as a department that comprehensively manages matters related to safety, including the occupational safety aspect.

Based on the above, JCR confirmed that NEXCO Central continues to implement various initiatives together with various stakeholders under the strong initiatives of management. JCR also confirmed that it also has a specialized department and human resources in the environmental and occupational safety aspects of expressways and that it is involved in the implementation of qualified projects from their specialized knowledge.

4. Conclusion

As a result of verifying the matters described in the previous section, JCR confirmed that the proceeds of the Bonds have been allocated for the green projects of climate change adaptation, which was originally assumed to be used for funding, and unallocated proceeds have been managed in an appropriate manners. JCR also confirmed that the Reporting concerning project for climate change adaptation has been carried out appropriately.

[JCR Green Bond Evaluation Matrix]

		Management, Operation and Transparency Evaluation				
		m1	m2	m3	m4	m5
Greenness Evaluation	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

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Important explanation of this Green Bond Evaluation

1. Assumptions, Significance, and Limitations of JCR Green Bond Evaluation
JCR Green Bond Evaluation, which is granted and provided by the 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 system, 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 issuer or by a third party requested by the issuer, but in principle it does not directly measure the effects.
2. Method used to conduct this evaluation
The methods used in this evaluation are listed on JCR's website (Sustainable Finance & ESG in <https://www.jcr.co.jp/en>) as JCR Green Finance Evaluation Methodology.
3. Relationship with Acts Concerning 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 evaluation differs from the credit rating and does not promise to provide or make available for inspection a predetermined credit rating.
5. Third-Party Evaluation of JCR Green Bond
There is no conflict 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 assessor 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
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