



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)



VERIFICATION REPORT

Japan Railway Construction, Transport and Technology Agency JRTT Sustainability Finance

DNV Post Issuance verification and periodical review (4th)

Prepared by: DNV Business Assurance Japan K.K.

Location: Kobe, Japan

Date: 27th Oct. 2022

Ref. Nr.: PRJN-234044-2021-PR-JPN-4

Revision history

Issue Date	Remarks
January 2019	JRTT Sustainability Finance Eligibility DNV GL Pre Issuance Verification and Report
October 2019	JRTT Sustainability Finance DNV GL Post Issuance verification and periodical review (1st)
November 2020	JRTT Sustainability Finance DNV GL Post Issuance verification and periodical review (2nd)
June 2021	JRTT Sustainability Finance Eligibility DNV Pre Issuance Verification and Report (R-1)
November 2021	JRTT Sustainability Finance DNV Post Issuance verification and periodical review (3rd)
October 2022 (This report)	JRTT Sustainability Finance DNV Post Issuance verification and periodical review (4th) <ul style="list-style-type: none"> - Allocation Status: Proceeds (sustainability bond 82.0 billion yen, sustainability loan 65.15 billion yen) have been allocated as planned - Updated evaluation criteria after June 2021 to Land Transport Criteria (Version 2). - Environmental benefit: Confirmed of CO₂ emissions per transport volume by CBS eligible criteria (low carbon land transport and land transport)

Disclaimer

Our assessment relies on the premise that the data and information provided by Issuer to us as part of our review procedures have been provided in good faith. Because of the selected nature (sampling) and other inherent limitation of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied as per scope of work. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Statement.

Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct¹ during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data included in the Framework except for this Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assessment process.

¹ DNV Code of Conduct is available from DNV website (www.dnv.com)

Scope and Objectives:

Japan Railway Construction, Transport and Technology Agency (hereinafter “JRTT” or “Issuer”) is an independent administrative organization and fully invested by government. JRTT is only one independent administrative organization who develops and supports transportation networks through railway and ship assets. Its organization is divided into the following five accounts: Construction Account, Maritime Account, Special Operation Account, Local public transportation Account, and Subsidy Account; moreover, this organization has the following five businesses activities: Railway construction, Joint Ownership Shipbuilding, Disposition of past national railway asset and payment of pensions, and Investments in Local Public Transportation and Railway Development Supports.

JRTT determined the basic philosophy indicated below to achieve the goals prescribed in Japan Railway Construction, Transport and Technology Agency Act. Furthermore, JRTT has formulated the environmental consideration policy as “Basic Environmental Policy” (determined at 27 Aug. 2013) and “Environmental Action Plan” (formulated at 1 Apr. 2018), and executed the specific commitment to reduce the environmental load for its business activities.



【JRTT’s Basic Philosophy】

Contribute to Build Tomorrow's Transportation Networks.

- We contribute to build safe, secure, eco-friendly transportation networks
- Our transportation network building helps improve people’s lives and further develop economies and societies
- In the course of building transportation networks, we use our reliable technical capacity, abundant experience, and advanced expertise to the fullest













The Promotion for the business of Railway Construction and Joint Ownership Shipbuilding through this sustainability finance issuance contributes the solution for environmental issues and the social benefits. These activities also contribute the SDGs goals set by the United Nations. Moreover, DNV has confirmed that JRTT captured and linked the relationship widely between SDGs goals and each business of overall organization. The outline of Green (Environmental) / Social benefit and Contribution to SDGs is described in the following table.

Table-1 JRTT sustainability finance for Environmental/Social benefits and Contribution to SDGs*

Project portfolio	Green (Environmental) benefit	Social benefit	Linkage/Contribution to SDGs
No.01 Railway Construction	Eligible category: Clean Transportation - Mitigation of environmental load (Greenhouse gas emission reduction, e.g. CO ₂)	Eligible category: - Essential and imperative transportation infrastructure - Low cost and easy access for various customers	<ul style="list-style-type: none"> •Goal 3: Good Health and Well-being •Goal 7: Affordable and Clean Energy •Goal 8: Decent Work and Economic Growth •Goal 9: Industry, Innovation and Infrastructure •Goal 11: Sustainable Cities and Communities •Goal 12: Responsible Consumption and Production •Goal 13: Climate Action •Goal 15: Life on Land 
No.02 Joint Ownership Shipbuilding	Eligible category: Clean Transportation, Pollution Prevention and Control - Mitigation of environmental load (Greenhouse gas emission reduction, e.g. CO ₂) - Marine environment conservation	Eligible category: - Essential and imperative transportation infrastructure and various user convenience - Efficient distribution - Operation of routes to remote island	<ul style="list-style-type: none"> •Goal 8: Decent Work and Economic Growth •Goal 9: Industry, Innovation and Infrastructure •Goal 11: Sustainable Cities and Communities •Goal 13: Climate Action •Goal 14: Life Below Water 

* DNV has confirmed that JRTT organized the contribution to the SDGs goals as follows, from the perspective of the environmental/social benefits per its governance system or its business activities, in addition to the contribution to SDGs goals related to the project portfolio of sustainability finance (shown in Table-1).

Table-2 Relationship between JRTT business activities and SDGs

JRTT Governance system/Business activities	Linkage/Contribution to SDGs
Governance system sustaining the business activities	<ul style="list-style-type: none"> •Goal 8 : Decent Work and Economic Growth •Goal 16: Peace and Justice Strong Institutions  
Securing/Cultivating human resources Appropriate staff assignment	<ul style="list-style-type: none"> •Goal 5: Gender Equality •Goal 8 : Decent Work and Economic Growth  
Activating communities	<ul style="list-style-type: none"> •Goal 9 : Industry, Innovation and Infrastructure •Goal 11: Sustainable Cities and Communities  
International cooperation	<ul style="list-style-type: none"> •Goal 3: Good Health and Well-being •Goal 7 : Affordable and Clean Energy •Goal 9: Industry, Innovation and Infrastructure •Goal 11: Sustainable Cities and Communities •Goal 13: Climate Action •Goal 17: Partnerships to achieve the Goal      

This report includes both Post Issuance Verification and Periodical review, which based on CBI programmatic certification, of JRTT Sustainability Finance^{*1} Issuances as Climate Finance(bond and loan) currently outstanding in FY 2021.

As JRTT sustainability finance, JRTT issued a total of 82.0 billion yen with a bond on 28th May 2021, 30th August 2021, 29th November 2021, and 25th February 2022, and raised a total of 65.15 billion yen with a loan on 30th November 2021 and 29th March 2022. JRTT has secured program certification from the Climate Bonds Initiative against the Climate Bonds Standard. DNV Business Assurance Japan K.K. (hereinafter “DNV”) conducted post issuance verification against Climate Bond Standards version3.0 (hereinafter “CBS v3.0”) and periodical review of the Finance eligibility assessment by using the Sustainability Bond Guidelines 2018 (ICMA, hereinafter “SBG”) and the Green Bond Guidelines (the Ministry of the Environment, Japan 2017, hereinafter “GBGLs”).

* 1: financing method that includes contribution to both environmental (green) and social (social) nature, and bond issuance (bond) and market borrowing (loan)

JRTT determined principle “We contribute to build safe, secure, eco-friendly transportation networks.” for social contribution. Under its principle, JRTT executes various business includes sustainability eligible project portfolio “Railway Construction” and “Joint Ownership Shipbuilding”. JRTT defines its sustainable social contribution through its business associating its Finance eligible project with SDGs. As of September 2022, JRTT has allocated the proceeds (bonds and loans) from JRTT Sustainability Finance to the following categories of nominated projects and assets as new allocation and refinance, as scheduled:

“Project 01, Railway Construction”

- No. R-2, Public railway; Leased railway [Arterial railway (Main line and Interurban line)]
*refinance
- No. R-3, Public railway; Assigned railway [Public railway operated by Private sector]
*refinance
- No. R-4, Urban railway *refinancing
- No. R-5, Shinkansen Lines *new allocation

Please refer to the schedule-1 for details.



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)

DNV has been commissioned by JRTT to provide the initial(pre-issuance) and periodic(post-issuance) verification and review of the JRTT's eligibility of the Finance against the CBS v3.0 determined Climate Bonds Initiative (hereinafter "CBI"), as well as SBG and GBGLs. Pre-issuance verification which was conducted in January 2019 concluded the eligibility of railway construction against CBS v3.0 and related technical sector criteria. Our criteria and information covered to achieve this is described under 'Work Undertaken' shown below. The periodic review was based on information and documents provided by JRTT as of 12th Sep 2022. Finance has received the CBI certification and been certified as programmatic certification who issues repeated and multiple finance which contribute environmentally sustainability. No assurance is provided regarding the financial performance of the Finance, the value of any investments in the Finance, or the long-term environmental benefits arising from the nominated projects. Our objective of these reviews has been to provide an assessment that the usage of the proceeds of the Finance has met the criteria established on the basis set out below.

Low Carbon Land Transport and the Climate Bonds Standard (Version 1.0)

Land Transport Criteria (Version 2) Oct. 2020

As the Framework and Verification Report were revised in June 2021, the Land Transport Criteria (Version 2) is used as the basis for evaluation of funding after that date.

Also, DNV includes other related criteria described in the section "Basis of DNV's opinion" for annual report review.



Responsibilities of the Management of JRTT and DNV

The management of JRTT has provided the information and data used by DNV during the delivery of this verification and review. Our statement represents an independent opinion and is intended to inform JRTT management and other interested stakeholders in the Finance as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by JRTT. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by JRTT used as a basis for this assessment were not correct or complete.

Basis of DNV's opinion

DNV has conducted the verification against the CBS v3.0^{*1} and associated Sector Technical Criteria through the creation and execution of a verification protocol addressing each requirement of those standard and criteria. The detail of areas covered in the DNV verification is summarized in Schedule 2 below.

Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the criteria is that a Finance should "enable capital-raising and investment for new and existing projects with environmental and social benefits".

As per DNV's Protocol for assessment, in addition to the CBS v3.0 above, DNV also considers the criteria against which the Finance has been reviewed are grouped under the four Principles (GBP^{*2}, SBP^{*3}, SBG^{*4}, GLP^{*5}, and GBGLs^{*6}) as follows:

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of a Finance must use the funds raised to finance eligible activities. The eligible activities should produce clear environmental and/or social benefits.
- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of a Finance should outline the process it follows when determining eligibility of an investment using Finance proceeds, and outline any impact objectives it will consider.
- **Principle Three: Management of Proceeds.** The Management of Proceeds criteria are guided by the requirements that a Finance should be tracked within the issuing organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.
- **Principle Four: Reporting.** The Reporting criteria are guided by the recommendation that at least Sustainability Reporting to the finance stakeholders should be made of the use of finance proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)

- *1: Climate Bonds Standard version 3.0 (Climate Bonds Initiative)
- *2: Green Bond Principles (June 2018, International Capital Market Association)
- *3: Social Bond Principles (June 2018, International Capital Market Association)
- *4: Sustainability Bond Guidelines (June 2018, International Capital Market Association)
- *5: Green Loan Principles (2018, Loan Market Association, Asia Pacific LMA and LOAN SYNDICATION AND TRADING ASSOCIATION)
- *6: Green Bond Guidelines, (March 2017, Ministry of the Environment, Japan)

Work undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by JRTT in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion includes:

Pre Issuance Verification/assessment (completed previously):

- Creation and execution of a Climate Bonds Standard Protocol, adapted to include the relevant Sector Technical Criteria for the Finance nominated projects and assets, as described above and in Schedule 2 to this Assessment;
- Assessment of documentary supporting documents provided by JRTT on the Finance and supplemented assessment by a high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Discussions with JRTT, and review of relevant documentation;
- Documentation of findings against each element of the criteria.
- Field survey and inspection against the projects and assets;

Post Issuance (Periodic) Verification and Assessment:

- Evaluation of the supporting documents provided by JRTT and related to the Finance issuance, high level desktop research, document reviews, and interviews with key personnel of the Issuer. These checks refer to best practices in current assessment and standard methodologies;
- Discussions with JRTT management and review of relevant documentation;
- Review of the nominated projects and assets as described in Schedule 2;
- Documentation of findings in detail.
- Field survey and inspection against the projects and assets, if required;

Our opinion as detailed below is a summary of these findings.

Findings and DNV's opinion

DNV has conducted the Post Issuance Verification of the Finance (bond) issued 28th May 2021, 30th August 2021, 29th November 2021 and 25th February 2022, and of the Finance (loan) issued 30th November 2021 and 29th March 2022 by JRTT. It is DNV's responsibility to provide an independent verification statement on the compliance of the JRTT Finance with the CBS v3.0.

DNV conducted the verification in accordance with the CBS v3.0 and with International Standard on Assurance Engagements 3000 Assurance Engagements other than Audits or Reviews of Historical Information. The verification included i) checking whether the provisions of the CBS v3.0 were consistently and appropriately applied and ii) the collection of evidence supporting the verification.

DNV's verification approach draws on an understanding of the risks associated with conforming to the CBS v3.0 and the controls in place to mitigate these. DNV planned and performed the verification by obtaining evidence and other information and explanations that DNV considers necessary to give limited assurance that the Finance continues to meet the requirements of the CBS v3.0.

Based on the limited assurance procedures conducted, nothing has come to our attention that causes us to believe that the Finances are not, in all material respects, in accordance with the requirements of the CBS v3.0, Associated Technical Criteria of Low Carbon Land Transport and Land Transport. Furthermore, nothing has come to our attention that causes us to believe that the reported impacts associated with the nominated projects and assets are inaccurate.

DNV also conducted periodical review, other than post issuance verification of the JRTT's annual report against to the criteria of GBP2018, SBP2018, SBG2018, GLP2018, and GBGLs2017 accordingly.

DNV's findings are listed below:

Principle One, Use of Proceed

JRTT has reported use of the proceeds (total finance proceeds: Sustainability bond 82.0 billion yen, Sustainability loan 65.15 billion yen) as new allocation and refinance into following two projects under the eligible projects on its website.

(1)Sustainability Finance Eligible Project (refinanced): Sustainability bond

Railway Construction (Project 01 R-2, R-3 and R-4)

Project 01 R-2: Public railway; Leased railway [Arterial railway (Main line and interurban line)]

Sub Total : 16.8 billion JPY

Project 01 R-3: Public railway; Assigned railway (Public railway operated by Private sector)

Sub Total : 32.35 billion JPY

Project 01 R-4: Urban railway line

Sub Total : 32.85 billion JPY

Total : 82.0 billion JPY

(2)Sustainability Finance Eligible Project (new allocation and refinanced): Sustainability loan

Railway Construction (Project 01 R-2, R-3 and R-5)

Project 01 R-2: Public railway; Leased railway [Arterial railway (Main line and interurban line)]

Sub Total : 6.02 billion JPY (refinance)

Project 01 R-3: Public railway; Assigned railway (Public railway operated by Private sector)

Sub Total : 4.08 billion JPY (refinance)

Project 01 R-5: Shinkansen Lines

Sub Total : 26.34 billion JPY (new allocation)

Total : 36.44 billion JPY

Unallocated amount : 28.71 billion JPY

Schedule-1 shows lists and details of sustainability projects.

DNV reviewed the eligibility of the funded projects and assets to meet the criteria for the project categories above. Although a portion of the proceeds raised by this Sustainability Loan may not be fully allocated within 24 months of funding (part of the CBSv3.0 requirements), DNV has considered that no critical issues as a sustainability loan will arise based on the following reasons comprehensively.

- The project is a rail project that meets the land transport requirements of the CBS technical standards and its sustainability is unlikely to deteriorate.
- Approximately 70% of loans are scheduled to be allocated by FY2023, and unallocated proceeds exceeding 24 months will be only a portion of the total.
- There is a high probability that the proceeds will be allocated to such eligible project by FY2026 in accordance with the provisions of Article 19, Paragraph 1 of the Independent Administrative Institution, Japan Railway Construction, Transport and Technology Agency Act.

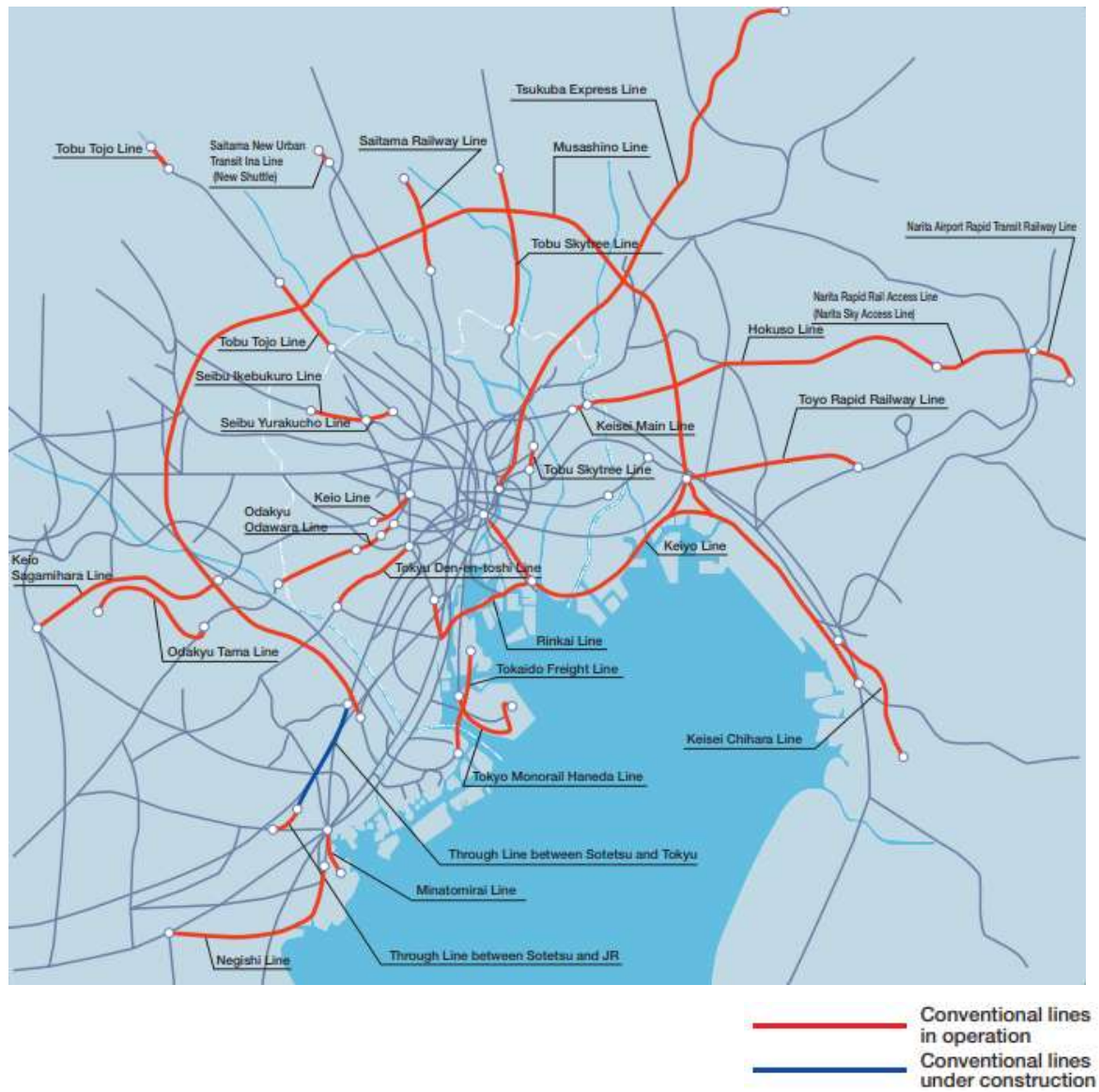


Fig-1 Project 01 representative railway construction

Principle Two, Process for Project Evaluation and Selection

The Finance's proceeds have been allocated solely to new allocation and refinance the projects and assets as defined in Schedule 1. As for the negative impact caused by these projects, appropriate countermeasures and practical action plans which comply with relevant regulations and laws have been taken and will be taken after the evaluation by JRTT. DNV confirmed that JRTT resulted that its effect is limited and appropriate action will be executed if required.

Principle Three, Management of Proceeds

DNV has reviewed evidence showing how JRTT traced the proceeds from the Finance (loan or Bond, from the time of issuance to the time of disbursement). Most of the proceeds fund has been allocated promptly. The details of the disbursement value are tracked using JRTT's internal protocol. At the end of each financial period (fiscal year), JRTT manages the outstanding balance of the Finance.

DNV confirmed based on the evidences showing by JRTT that the full amount of 82.0 billion JPY in Sustainability Bonds and 36.44 billion JPY out of 65.15 billion JPY in Sustainability Loans have been allocated at the end of the FY 2021 (End of Mar. 2022) as new allocation and refinance, as scheduled. DNV also confirmed that unallocated proceeds as of end of March, 2022 amounted to 28.71 billion JPY and were managed in cash and cash equivalents.

As stated above, DNV provides no assurance regarding the financial performance of the Finance, the value of any investments in the Finance, or the effects of the transaction.

Principle Four, Reporting

DNV has confirmed that JRTT annual report includes and maintains a dedicated section on the Finance in its website. This includes the project and value of the proceeds invested, as well as the associated qualitative and quantitative environmental impacts based on the MLIT data.

JRTT disclosed environmental and social benefit and management proceeds on its web site.

<https://www.jrtt.go.jp/ir/sustainability-finance.html> (Reporting)

- CO₂ emission per transportation unit (FY 2020)
- Numbers of passenger of eligible railway project
(representative line) (FY 2019)
- FY 2021 Fund amount of allocation and outstanding
- FY 2021 Refinance share (Unit: %)
- FY 2021 Project progress (funded amount)

Project progress has been published in the followings in its web site

- Environmental report 2022
- FY 2021_Annual business report
- FY 2021_Annual financial report
- FY 2021_Annual financial statement
- FY 2021_project report
- Finance information report

Project progress information above includes other than project funded FY 2021.

Table-1 shows a list of CO₂ emissions per unit transportation volume by transportation method, updated by the Ministry of Land, Infrastructure, Transport and Tourism as the latest version for FY2020. CO₂ emission per unit (passenger and freight) is comparably lower enough than other transportation categories.

MLIT: Ministry of Land, Infrastructure, Transport and Tourism, Japan

Table-1 CO₂ emission per unit(passenger and freight) (2020)
reference : MLIT

category	passenger : g-CO ₂ /p-km	freight : g-CO ₂ /t-km
Private light vehicle	131	1,215
Cargo vehicle	-	216
Airplane	133	-
Bus	109	-
Ship	-	43
Railway	<u>28</u>	<u>21</u>



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)

DNV Business Assurance Japan K.K.

27th Oct. 2022

A handwritten signature in black ink, appearing to read "Naoki Maeda".

Naoki Maeda

Managing Director

DNV Business Assurance Japan K.K.

A handwritten signature in black ink, appearing to read "Masato Kanedome".

Masato Kanedome

Project Leader

DNV Business Assurance Japan K.K.

A handwritten signature in black ink, appearing to read "Jun Chokai".

Jun Chokai

Assessor

DNV Business Assurance Japan K.K.

About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

1. Schedule-1 JRTT Sustainability finance nominated project/asset portfolio

Table JRTT Sustainability Finance (Sustainability bond) Project/Asset Portfolio (Project No. 01)

Project No.		Nominated Project/Asset Portfolio	Sustainability Project Category	Sustainability Project Sub-Category	Funded amount in FY 2021	Remarks
01	R-1	Public railway; Railway Project under the Urban Railway Convenience Improvement Law (Projects to Enhancement the convenience of urban railways)	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	—	Railway Construction (Construction Account): Nominated Project •Eastern Kanagawa Lines•etc
	R-2	Public railway; Leased railway (Arterial railway (Main line and Interurban line))	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation (public)	16.8 billion JPY	Railway Construction (Construction Account) : the following is project example Nominated Project •Keiyo line •Musashino line•etc
	R-3	Public railway; Assigned railway (Public railway operated by Private sector)	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation (public)	32.35 billion JPY	Railway Construction (Construction Account): the following is project example Nominated Project •Minatomirai 21 line•Odakyu Odawara line•etc
	R-4	Public railway; Railway Project under the Act on Special Measures concerning Integrated Promotion of Residential Land Development and Railway Construction in Major Urban Areas (Urban railway)	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation (public)	32.85 billion JPY	Railway Construction (Construction Account) : Nominated Project •Joban new line (TX line)
	R-5	Shinkansen Lines	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation (public)	—	Railway Construction (Construction Account) : Nominated Project Shinkansen Lines



Japan Railway Construction, Transport and Technology Agency(JRJT) Sustainability Finance Post Issuance verification and periodical review (4th)

						<ul style="list-style-type: none"> - Hokkaido Shinkansen (between Shin-Hakodate-Hokuto and Sapporo) - Hokuriku Shinkansen (between Kanazawa and Tsuruga) - Nishi Kyushu Shinkansen (between Takeo Onsen and Nagasaki)
<p>The amount of assets: 1,256,497,655,276 JPY (end of FY 2021)</p> <p>Sustainability Finance (Sustainability Bond) allocated amount; 82,000,000,000 JPY (FY 2021 result)</p>						

Japan Railway Construction, Transport and Technology Agency(JRRT) Sustainability Finance Post Issuance verification and periodical review (4th)
Table JRRT Sustainability Finance (Sustainability Loan) Project Portfolio (Project No. 01)

Project No.		Nominated Project/Asset Portfolio	Sustainability Project Category	Sustainability Project Sub-Category	Funded amount in FY 2021	Remarks
01	R-1	Public railway; Railway Project under the Urban Railway Convenience Improvement Law (Projects to Enhancement the convenience of urban railways)	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	—	Railway Construction (Construction Account) : Nominated Project •Eastern Kanagawa Lines•etc
	R-2	Public railway; Leased railway (Arterial railway (Main line and Interurban line))	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	6.02 billion JPY	Railway Construction (Construction Account) : the following is project example Nominated Project •Keiyo line •Musashino line•etc
	R-3	Public railway; Assigned railway (Public railway operated by Private sector)	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	4.08 billion JPY	Railway Construction (Construction Account) : the following is project example Nominated Project •Minatomirai 21 line•Odakyu Odawara line•etc
	R-4	Public railway; Railway Project under the Act on Special Measures concerning Integrated Promotion of Residential Land Development and Railway Construction in Major Urban Areas (Urban railway	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	—	Railway Construction (Construction Account) : Nominated Project •Joban new line (TX line)
	R-5	Shinkansen Lines	•Clean transportation •Affordable basic infrastructure	•rail (electric) •transportation(public)	26.34 billion JPY	Railway Construction (Construction Account) : Nominated Project

						Shinkansen Lines - Hokkaido Shinkansen (between Shin-Hakodate-Hokuto and Sapporo) - Hokuriku Shinkansen (between Kanazawa and Tsuruga) - Nishi Kyushu Shinkansen (between Takeo Onsen and Nagasaki)
						The amount of assets: 1,256,497,655,276 JPY (end of FY 2021) Sustainability Finance (Sustainability loan) allocated amount; 36,440,000,000 JPY (FY 2021 result) Unallocated amount; 28,710,000,000 JPY (FY 2021 result)



2. Schedule-2 CBS v3.0 Verification criteria

Summary criteria for assertions of compliance with the CBS v3.0

Prior to incorporating eligible projects and assets for the Finance, the criteria for reviewing relevant projects and assets are categorized based on CBS 3.0 and technical criteria. The main requirements of CBS3.0 version and technical criteria are roughly categorized into Part A to Part C in the table below.

DNV has verified that JRTT conforms with all requirements here based on the evidences provided JRTT's relevant documents and interview through verification. Hereafter 'bond' also suggests finance, both bond and loan. These requirements broadly include:

Part A: Pre-Issuance Requirements

Area	Requirements
1. Use of Proceeds	The Net Proceeds of the Bond shall be allocated to the Nominated Projects & Assets.
2. Process for Evaluation and Selection of Projects & Assets	(The Issuer) shall document and maintain a decision-making process which it uses to determine the continuing eligibility of the Nominated Projects & Assets.
3. Management of Proceeds	The Net Proceeds of the Bond can be credited to a sub-account, moved to a sub-portfolio, or otherwise tracked by the Issuer in an appropriate manner and documented.
4. Reporting Prior to Issuance	(The issuer) shall clarify the disclosure of the framework, eligible criteria, management of allocation (new investment and refinancing) unallocated funds, preparation of update reports including project information and disclosure plans.

Part B: Post-Issuance Requirements

Area	Requirements
5. Use of Proceeds	The Net Proceeds of the Bond shall be allocated to the Nominated Projects & Assets. Allocated projects and assets should not be mixed with other green bonds, loans, etc. In addition, the value of the target project and assets should be at least equal to or greater than the bond issuance amount (at the time of issuance) or the issued amount.
6. Process for Evaluation and Selection of Projects & Assets	The Issuer shall document and maintain a decision-making process which it uses to determine the continuing eligibility of the Nominated Projects & Assets.
7. Management of Proceeds	The Net Proceeds of the Bond shall be credited to a sub account, moved to a sub portfolio or otherwise identified by the Issuer in an appropriate manner, and documented.
8. Reporting	The Issuer shall prepare and disclose an Update Report at least annually while the Bond remains outstanding. The update report shall include allocation reporting, environmental improvement effect and information about the target project. Information required for eligibility shall be provided to the verifier and to the Climate Bonds Standard Board.

Part C: Eligibility of Projects & Assets

Area	Requirements
9. Climate Bonds Taxonomy	Nominated Projects & Assets shall fall into one or more of the investment areas listed as included in the Climate Bonds Taxonomy.
10. Sector Eligibility Criteria	<p>Nominated Projects & Assets shall meet the specific eligibility requirements provided in the relevant Sector Eligibility Criteria documents.</p> <p>Followings are outline of the sector criteria against the verification</p> <p>Low carbon land transport</p> <p><u>All electrified public transport (infrastructure, infrastructure refurbishment, rail and transport vehicles) meets the standards. For example, electrified railroads, trams, trolleys, buses and cable cars.</u></p>

	<p>Land Transport</p> <p>The scope of coverage in the land transport sector is as follows, and projects that meet individually set eligibility criteria are eligible.</p> <p>(Example of Eligibility Criteria: The mode of transport is electric, Being below the upper limit of CO₂ emissions per unit transportation distance, Manufacture, purchase and leasing business of major parts (batteries, etc.) used in eligible vehicles, Construction, development, purchase and operation of railway networks and railway lines, etc., Station buildings and maintenance sites that contribute to the operation of eligible projects, ICT maintenance, etc.)</p> <ul style="list-style-type: none"> • Passenger cars and Commercial vehicles • Public passenger transport and Freight transport by road • Passenger rail transport rolling stock and Freight rail transport rolling stock • Rail transport networks and Rail line • Miscellaneous vehicles for other sectors • Infrastructure for low carbon transport
--	--

3. Schedule-3 Sustainability Finance Eligibility Assessment Protocol

Checklist-1 Sustainability Finance Guideline (SBG) Eligibility checklist

Finance means JRTT's general proceeds instruments including both bond and loan. Hereafter 'bond/BOND' also suggests both bond and loan, official bond statement and loan document. JRTT Sustainability Finance Framework, official bond statement and loan document, etc. will be published for explanation to investor on JRTT's website as follows;

<https://www.jrtt.go.jp/ir/sustainability-finance.html>

Following (1)~(4) are based on Sustainability Bond Guideline (ICMA, 2018) "SBG" referring to Green Bond Principle (ICMA, 2018), Social Bond Principle (ICMA, 2018). DNV established checklist according to the above guideline and principles. DNV describes our findings in the checklists based on the evidences provided JRTT's relevant documents and interview through verification.

(1) SBG-1 Use of Proceeds

Ref.	Criteria	Requirements	DNV Findings
1a	Type of bond	<p>The bond must fall in one of the following categories, as defined by the Sustainability (Green and Social) Bond Principles:</p> <ul style="list-style-type: none"> • Sustainability Use of Proceeds Bond • Sustainability Use of Proceeds Revenue Bond • Sustainability Project Bond • Sustainability Securitized Bond 	<p>The reviewed evidence confirms that the BOND falls in the category:</p> <p>Green/Social (Sustainability) Use of Proceeds Bond.</p>
1b	Project Categories	<p>The cornerstone of a Sustainability Bond is the utilization of the proceeds of the bond which</p>	<p>As identified by the purpose of the loan is to use the proceeds to finance and refinance for projects falling under the following categories;</p>

Ref.	Criteria	Requirements	DNV Findings
		should be appropriately described in the legal documentation for the security.	<p>FY 2021, the full amount of 82.0 billion JPY in Sustainability Bonds and 36.44 billion JPY out of 65.15 billion JPY in Sustainability Loans have been allocated to the <u>Gothic, Italic and underscored</u> projects.</p> <p><u><Railway Construction></u></p> <ul style="list-style-type: none"> - Public railway; Railway Project under the Urban Railway Convenience Improvement Law (Projects to Enhancement the convenience of urban railways) - <u>Public railway; Leased railway (Arterial railway (Main line and Interurban line))</u> - <u>Public railway; Assigned railway (Public railway operated by Private sector)</u> - <u>Public railway; Railway Project under the Act on Special Measures concerning Integrated Promotion of Residential Land Development and Railway Construction in Major Urban Areas (Urban railway)</u> - <u>Shinkansen Lines</u> <p><Joint Ownership shipbuilding></p> <ul style="list-style-type: none"> - Joint ownership shipbuilding (freight and passenger ship) <p>DNV's assessment concluded that these asset and project would present eligible project against green and social bond principles (as sustainability bond) and green loan principles. Above information was included in official document about a bond and loan issued by JRTT. DNV concluded that 1b requirement is satisfied. In case that new project is nominated, JRTT will evaluate and its eligibility and disclose it as official document.</p>



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)

Ref.	Criteria	Requirements	DNV Findings
1c	Environmental and Social benefits	All designated Sustainability Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the issuer.	<p>DNV, as CBI verifier, assessed and verified eligibility of Railway construction project portfolio through relevant criteria such as Low Carbon Land Transport and Land Transport as well as CBS. Railway construction project portfolio also has social benefit. Joint ownership shipbuilding project portfolio aligns with mainly social benefit and also have environmental secondary benefit (CO₂ emission reduction and prevent marine pollution).</p> <p>DNV confirmed that JRTT evaluates its benefit qualitatively and quantitatively as much. DNV also confirmed that JRTT determines the relationship between those projects and SDGs mapping.</p> <p>DNV reviewed JRTT provided document and explanation that JRTT already identified the environmental risk and addressed appropriate countermeasures. DNV concluded that 1c requirement is satisfied.</p>
1d	Refinancing share	In the event that a proportion of the proceeds may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced.	<p>The proceeds of the BOND, in their entirety has been allocated to sustainability project described schedule-1 as new allocation and refinance, project 01 in FY 2021. Refinance was as follows</p> <p>-Refinance to Railway construction project portfolio (all for refinance)</p> <p>Identification of finance or refinance has been disclosed to investor in official document.</p>

(2) SBG-2 Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	DNV Findings
2a	Investment-decision process	<p>The issuer of a Sustainability Bond should outline the decision-making process it follows to determine the eligibility of projects using Sustainability Bond proceeds. This includes, without limitation:</p> <ul style="list-style-type: none"> • A process to determine how the projects fit within the eligible Sustainability Projects categories identified in the Green Bond Principles and Social bond principle; • The criteria making the projects eligible for using the Sustainability Bond proceeds; and • The environmental and social sustainability objectives 	<p>As well as Climate Bond Standards v3.0 and related sector technical criteria and selected following eligible projects. Since the CBI technical criteria for the Joint Ownership shipbuilding was not effective at the time of the assessment, it was decided to verify when the target project is executed in the future.</p> <p><reference criteria></p> <ul style="list-style-type: none"> -Climate Bonds Standard (version 3.0 Low Carbon Land Transport and Land Transport) -Green Bond Principles (ICMA) -Social Bond Principles (ICMA) -Sustainability Bond Guidelines (ICMA) -Green Loan Principles (Loan Market Association) -Green Loan Principles (Asia Pacific Loan Market Association) -Green Loan Principles (The LOAN SYNDICATION AND TRADING ASSOCIATION) -Green Bond Guidelines (Ministry of the Environment 2017 Edition) <p>(Reference: Green Bonds, Social Bonds; SDGs Related: High Level Mapping to Sustainable Goals (June 2018 Edition, ICMA))</p> <p><eligible project></p> <ul style="list-style-type: none"> - Clean Transportation (Railway Construction, Joint Ownership shipbuilding) - Pollution prevention and control (Joint Ownership shipbuilding) - Essential and imperative transportation infrastructure (Railway Construction, Joint Ownership shipbuilding) - Low cost and easy access for various customers (Railway Construction, Joint Ownership shipbuilding) - Efficient distribution (Joint Ownership shipbuilding) - Operation of routes to remote island (Joint Ownership shipbuilding) <p>Those nominated project portfolio is discussed with JRTT's related department and responsibilities (JRTT boards). DNV also confirmed that JRTT determines the relationship between those projects and SDGs mapping.</p>



Japan Railway Construction, Transport and Technology Agency(JRTT) Sustainability Finance Post Issuance verification and periodical review (4th)

Ref.	Criteria	Requirements	DNV Findings
			DNV concluded that 2a requirement is satisfied through interview and document review.
2b	Issuer's environmental and social and governance framework	In addition to information disclosed by an issuer on its Sustainability Bond process, criteria and assurances, Sustainability Bond investors may also take into consideration the quality of the issuer's overall framework and performance regarding environmental sustainability.	<p>As per the interview and review documents provided by JRTT, DNV confirmed that JRTT has addressed to achieve both sustainable green and social activities according to environmental action(https://www.jrtt.go.jp/corporate/efforts/environment.html) and domestic marine route for future creative plan published by MLIT(http://www.mlit.go.jp/common/001190904.pdf).</p> <p>DNV also confirmed that JRTT has issued and intends to issue the loan and bonds continuously based on their framework which aligns with CBS requirement and CBI certification (programmatic certification)</p> <p>https://www.climatebonds.net/certification/get-certified https://www.climatebonds.net/programmatic-certification.</p> <p>DNV concluded that 2a requirement is satisfied.</p>

(3) SBG-3 Management of Proceeds

Ref.	Criteria	Requirements	DNV Findings
3a	Tracking procedure-1	The net proceeds of Sustainability Bonds should be credited to a sub-account, moved to a sub- portfolio or otherwise tracked by the issuer in an appropriate manner and attested to by a formal internal process that will be linked to the issuer's lending and investment operations for Sustainability Projects.	It is confirmed that each proceeds expense of JRTT is required to submit each use of proceeds and be approved by minister of MLIT according to the relevant laws. Deposit accounts of the proceeds are strictly managed by each project portfolio. The balance of the proceeds is also managed with subaccount spread sheet (divided each project unit). DNV has reviewed actual documents then concluded that 3a requirement is satisfied.
3b	Tracking procedure-2	So long as the Sustainability Bonds are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible sustainability investments or loan disbursements made during that period.	It is confirmed balance of the bond and loan tracked proceeds (allocated and unallocated amount) has been managed at least annually during bond reimbursement or loan disbursement period. DNV reviewed actual documents (the related documents of fund settlement, 2021) then concluded that 3b requirement is satisfied.
3c	Temporary holdings	Pending such investments or disbursements to eligible Sustainability Projects, the issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	According to the Japanese incorporated administrative agency general law, temporary investment instrument is limited to avoid risks. It is clearly described some options of the balance of the bond proceed will be managed safely instrument in framework. DNV concluded that 3c requirement is satisfied. DNV confirmed, in the assessment conducted on September 12, 2022, that 28.71 billion yen in unallocated proceeds existed, which were confirmed to be managed with cash or cash equivalents.



(4) SBG-4 Reporting

Ref.	Criteria	Requirements	DNV Findings
4a	Periodical reporting	<p>In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, issuers should provide at least annually a list of projects to which Sustainability Bond proceeds have been allocated including:</p> <ul style="list-style-type: none">- when possible, with regards to confidentiality and/or competitive considerations- a brief description of the projects and the amounts disbursed, as well as the expected environmentally and social sustainable impact.	<p>JRJT has published the annual report including a dedicated section on the Finance in JRJT website. This includes description of the project and value of the proceeds invested, as well as the associated environmental impact. DNV reviewed that JRJT has already reported them in its website. DNV confirmed it as per report in its website, then concluded that 4a requirement is satisfied.</p> <p>https://www.jrjt.go.jp/ir/sustainability-finance.html (Refer to the reporting section)</p>