



## SECOND PARTY OPINION

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# EAST JAPAN RAILWAY COMPANY SUSTAINABILITY BOND (1ST - 3RD) PERIODIC REVIEW

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### Revision History

Revision number	Date of Issue	Remarks
0	27 December 2023	Initial
1	27 December 2024	FY2024 periodic review - Update on the allocation status of proceeds and their environmental and social benefits

### Disclaimer

Our assessment relies on the premise that the data and information provided by Fundraiser 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 Conduct<sup>1</sup> 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.

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<sup>1</sup> DNV Code of Conduct is available from DNV website ([www.DNV.com](http://www.DNV.com))

## I . Scope and Objectives

East Japan Railway Company (hereinafter, “JR East”) has commissioned DNV Business Assurance Japan (hereinafter, “DNV”) to conduct periodic reviews of its Sustainability Bonds (1st, 2nd, and 3rd Sustainability Bonds, hereinafter “these Bonds”).

The objective of the periodic review of DNV is to conduct an assessment to confirm that these Bonds meet the criteria such as the Sustainability Bond Guidelines (ICMA, hereinafter “SBG”), the Green Bond Principles (ICMA, hereinafter “GBP”), the Green Bond Guidelines (Ministry of the Environment, hereinafter “GBGL”), the Social Bond Principles (ICMA, hereinafter “SBP”), and the Social Bond Guidelines (Financial Services Agency, hereinafter “SBGL”), which will be described later, and to provide a second party opinion on the eligibility of these Bonds.

JR East issued the 1st Sustainability Bonds (unsecured straight bonds) of JPY 30 billion on 27 January 2020, the 2nd Sustainability Bonds (unsecured straight bonds) of JPY 30 billion on 25 January 2021, and the 3rd Sustainability Bonds (unsecured straight bonds) of JPY 30 billion on 21 January 2022. DNV conducted a periodic review for the period from the latest periodic review to November 2024 based on the SBG, GBP/GBGL, and SBP/SBGL.

DNV, as an independent external reviewer, identified no real or perceived conflict of interest associated with the delivery of this second party opinion for JR East.

In this paper, no assurance is provided regarding the financial performance of the Sustainability Bonds, the value of any investment in the Sustainability Bonds, or the long-term environmental benefits of the transaction.

### Standards/guidelines to be applied

No.	Standards/Guidelines	Scheme owner	Applied level <sup>*1*2</sup> (Year of issuance)		
			1st	2nd	3rd
1.	Sustainability Bond Guidelines (SBG)	International Capital Market Association (ICMA)	Apply (2018)	Apply (2018)	Apply (2021)
2.	Green Bond Principles (GBP)	International Capital Market Association (ICMA)	Apply (2018)	Apply (2018)	Apply (2021)
3.	Green Bond Guidelines (GBGL)	Ministry of the Environment	—	—	Apply (2020)
4.	Social Bond Principles (SBP)	International Capital Market Association (ICMA)	Apply (2018)	Apply (2020)	Apply (2021)
5.	Social Bond Guidelines (SBGL)	Financial Services Agency	—	—	Apply (2021)
6.	Green and Social Bonds: A High-Level Mapping to the Sustainable Development Goals	International Capital Market Association (ICMA)	Refer		

\*1 Apply: Eligibility for all four core common elements to each principle and guideline was assessed.

\*2 Refer: Based on the Sustainability Bond projects and implementation plans, relevant contents were partially considered.



## II. Responsibilities of JR East and DNV

The management of JR East has provided the information and data used by DNV during the delivery of this review.

DNV's second party opinion represents an independent opinion and is intended to inform JR East and other interested stakeholders in the allocated Sustainability Bonds of 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 JR East. 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 the management of JR East and used as a basis for this assessment were not correct or complete.

## III. Basis of DNV's Opinion

To provide as much flexibility for the issuer, JR East, as possible, DNV has adapted our JR East Sustainability Bonds assessment methodology, which incorporates the requirements of the SBG, GBP/GBGL, and SBP/SBGL to create a Sustainability Bonds Eligibility Assessment Protocol (hereinafter, "DNV's Protocol"). Please refer to Schedule-2. The Protocol is applicable to Sustainability Bonds under the SBP, GBP/GBGL, and SBP/SBGL.

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

As per our Protocol, the criteria against which the Sustainability Bonds has been reviewed are grouped under the four Principles:

- **Principle One: Use of Proceeds**

The Use of Proceeds criteria are guided by the requirement that a Sustainability Bonds issuer must use the funds raised to finance eligible activities. The eligible activities should produce clear social and environmental benefits.

- **Principle Two: Process for Project Evaluation and Selection**

The Project Evaluation and Selection criteria are guided by the requirements that a Sustainability Bonds issuer should outline the process it follows when determining eligibility of an investment using Sustainability Bonds 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 the Sustainability Bonds 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 bond investors should be made of the use of bond proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

## **IV. 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 JR East 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 included:

### **i. Pre-Issuance Assessment of Sustainability Bonds (\* not included in this report)**

- Creation of a JR East specific Protocol, adapted to the purpose of the Sustainability Bonds, as described above and in Schedule-2 to this assessment;
- Assessment of documentary evidence provided by JR East on the Bond and supplemented by high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Discussions with JR East, and review of relevant documentation;
- Documentation of findings against each element of the criteria.

### **ii. Post-Issuance Assessment of Sustainability Bonds \*This Report**

- Assessment of evidential documents provided by JR East after issuance of the Sustainability Bonds, and supplemental assessment by desk review from a higher perspective;
- Interview with key personnel of JR East, and review of the relevant documentation;
- Field research and inspection (if necessary);
- Review of the nominated projects and assets at the time of the post-issuance verification (update of the details mentioned in Schedule-1);
- Document creation of post-issuance assessment result.

## V. Findings and DNV's Opinion

DNV's findings and opinion are listed below:

### Principle One: Use of Proceeds

DNV has confirmed that, as of December 2024, JR East had allocated most of the proceeds from these Bonds to the following projects:

#### 1. E235 series railcars (Yokosuka/Sobu Rapid Line Service) ... JPY 26.4 billion allocated (1st Sustainability Bonds), JPY 26.0 billion allocated (2nd Sustainability Bonds)

This project is to manufacture and introduce a new type of railcars that combine improved environmental friendliness through the latest energy-saving technologies, improved operational stability through the use of dual systems for major equipment and the latest condition monitoring functions, and improved comfortability by introducing wider seats (see Figure-1). DNV has confirmed that the project is progressing smoothly.



Figure-1 Exterior of an E235 series railcar

#### 2. AC Storage Battery-driven train EV-E801 series (Oga Line) ... JPY 3.4 billion allocated (1st Sustainability Bonds)

This project is to manufacture and introduce the accumulator railcar train EV-E801 series AC Storage Battery-driven trains, which are equipped with large-capacity storage batteries and can run even in non-electrified sections (see Figure-2). DNV has confirmed that the project has been completed and that the target number of six trains is running smoothly.



Figure-2 Exterior of an EV-E801 series train

#### 3. Renewable energy (Solar and wind power generation) ... JPY 3.8 billion allocated (2nd Sustainability Bonds)

This project is to construct and install solar and wind power plant as shown in Table-1. DNV has confirmed that both of them have already started operation and are running smoothly.

Table-1 Overview of renewable energy projects

Project Name	Category	Location	Equipment Capacity	Start of Operation
Keiyo Rolling Stock Center Solar Cell Power Plant	Solar power	Mihama Ward, Chiba City, Chiba Prefecture	1,050 kW	March 2014
Uchihara No.1 & No.2 Solar Power Plants	Solar power	Kasama and Mito City, Ibaraki Prefecture	3,250 kW	February 2015
Aomori Ishie Solar Power Plant	Solar power	Oaza Ishie, Aomori City, Aomori Prefecture	1,990 kW	August 2019
JR Akita Shimohama Wind Power Station	Wind power	Shimohama Hanekawa, Akita City, Akita Prefecture	1,990 kW	December 2016

**4. Rebuilding of wards, etc. at JR Tokyo General Hospital ... JPY 9.1 billion allocated (3rd Sustainability Bonds)**

This project is to rebuild the wards (inpatient wing) of JR Tokyo General Hospital, which was constructed for more than 40 years ago, as well as to build a new Healthcare Wing (tentative name) and a new courtyard (see Figure-3). The Healthcare Wing (tentative name) opened in advance in April 2024 as “E-wing,” and the new ward (inpatient wing) is scheduled to open in the spring of 2025. DNV has confirmed that the project is progressing as planned.



Figure-3 Exterior image

**5. KAWASAKI DELTA ... JPY 20 billion allocated (3rd Sustainability Bonds)**

This project is to develop KAWASAKI DELTA, a development plan for the west exit of Kawasaki Station, which was promoted with the aim of “sustainable urban development” based on the JR East Group Management Vision “Move Up” 2027 (see Figure-4). Table-2 shows the overview of the project. DNV has confirmed that the entire amount was allocated to this project as refinancing and that the project has been completed as planned.



Figure-4 Appearance of KAWASAKI DELTA

Table-2 Overview of KAWASAKI DELTA

	JR Kawasaki Tower Office Building	JR Kawasaki Tower Commercial Building	Hotel Metropolitan Kawasaki
Location	1-5 Omiya-Cho, Saiwai-Ku, Kawasaki-Shi, Kanagawa Prefecture		
Surface area	Approx. 12,400 m <sup>2</sup>		

Total floor area	Approx. 137,000 m <sup>2</sup>		
Number of stories Height	29 floors above ground /2 basement floors Approx. 128 m	5 floors above ground /1 basement floor Approx. 27 m	16 floors above ground Approx. 59 m
ZEB* (Primary energy reduction rate)	ZEB Ready (52%)	ZEB Oriented (46%)	ZEB Oriented (41%)
CASBEE	Rank S (expired in April 2024)		
Current status	The entire city block was completed in April 2021, and all facilities have already opened.		

\* ZEB ; net Zero Energy Building

## Principle Two: Process for Project Evaluation and Selection

Through the review, DNV has confirmed that the nominated sustainability projects listed in Schedule-1 are in compliance with the goals of the JR East Group Management Vision “Move Up” 2027, the “Energy Vision 2027 – Connect” based on the vision, and the long-term environmental goal “Zero Carbon Challenge 2050,” which are related to clean transportation/renewable energy/green buildings and climate change adaptation, etc. contributing to CO<sub>2</sub> emission reduction, and that they have been evaluated and selected through appropriate prescribed processes at the Finance & Investment Planning Department and relevant internal departments of JR East.

Specifically, the Finance & Investment Planning Department selects eligible projects based on a comprehensive analysis and review of financial aspects, technical and operational aspects, market environment, and ESG risks, and the Director in charge of Finance & Investment Planning makes the final decision.

As for the environmental and social impact of investments and business operations, DNV has confirmed that the Group company/department in charge of the project identifies and assesses risks in line with the company-wide risk management system and under the management of the Corporate & Legal Strategies Department before the implementation of investment or business to reduce risks or take other measures where necessary, and that a system has been established to ensure that the proceeds of the Sustainability Bonds etc. are not allocated to projects related to the following:

- Transactions that do not comply with the laws and regulations of the country in which they take place, including laws in relation to unfair business practices, bribery, corruption, extortion, and embezzlement.



### **Principle Three: Management of Proceeds**

DNV has confirmed how JR East has managed the proceeds since the latest periodic review until November 2024. The allocation status of proceeds is shown in Tables 3 to 5 in Principle Four.

DNV has confirmed that the net proceeds are managed on a quarterly basis by the Finance & Investment Planning Department of JR East, which prepares a dedicated management sheet and manages the allocation status.

DNV has confirmed in the latest periodic review that JR East had fully allocated the proceeds from the 1st and 2nd Sustainability Bonds to each eligible project as planned as of November 2023. DNV has also confirmed that the unallocated proceeds of the 3rd Sustainability Bonds as of 30 September 2024 (JPY 0.7 billion) were managed in cash and will be fully allocated within FY2024.

Note as mentioned earlier that no assurance is provided regarding the financial performance of these Bonds, the value of any investment, or the long-term environmental benefits of the transaction.

### **Principle Four: Reporting**

DNV has confirmed that JR East plans to disclose the allocation status of proceeds and the social and environmental benefits on its website. According to its Framework, the allocation status of proceeds will be reported until the proceeds are fully allocated, and the social and environmental benefits will be reported until the redemption of these Bonds.

Through periodic reviews, DNV has confirmed that the social and environmental benefits brought about by the Sustainability Bonds have been properly calculated using the method set out by JR East prior to the issuance of these Bonds, and that the social and environmental benefits were obtained as planned.

The following tables show the allocation status of proceeds and the social and environmental benefits of these Bonds in the period up to 30 September 2024.

**<Allocation status>**

**1st Sustainability Bonds (unsecured straight bonds)**

DNV has confirmed that the proceeds from the 1st Sustainability Bonds (unsecured straight bonds) were fully allocated as planned, as shown in Table-3.

Table-3 Allocation status of proceeds from the 1st Sustainability Bonds (unsecured straight bonds)

Eligible projects	GBP Category	SBP Category	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
E235 series railcars (Yokosuka/Sobu Rapid Line Service)	Clean transportation	Affordable basic infrastructure	JPY 29.8 billion	—	JPY 29.8 billion	—
AC Storage Battery-driven train EV-E801 series (Oga Line)						
Total amount				JPY 29.8 billion (fully allocated)		—

**2nd Sustainability Bonds (unsecured straight bonds)**

DNV has confirmed that the proceeds from the 2nd Sustainability Bonds (unsecured straight bonds) were fully allocated as planned, as shown in Table-4.

Table-4 Allocation status of proceeds from the 2nd Sustainability Bonds (unsecured straight bonds)

Eligible projects	GBP Category	SBP Category	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
E235 series railcars (Yokosuka/Sobu Rapid Line Service)	Clean transportation	Affordable basic infrastructure	JPY 29.8 billion	—	JPY 26 billion	—
Solar power generation*1	Renewable energy	—		JPY 3.8 billion	—	—
Wind power generation*2						
Total amount				JPY 29.8 billion (fully allocated)		—

\*1 Keiyo Rolling Stock Center Solar Cell Power Plant, Uchihara No.1 & No.2 Solar Power Plants, Aomori Ishie Solar Power Plant

\*2 JR Akita Shimohama Wind Power Station

### 3rd Sustainability Bonds (unsecured straight bonds)

DNV has confirmed that the proceeds from the 3rd Sustainability Bonds (unsecured straight bonds) were progressively allocated as planned, as shown in Table-5, and that the unallocated amount as of 30 September 2024 (JPY 0.7 billion), which was managed in cash, will be fully allocated within FY2024.

Table-5 Allocation status of proceeds from the 3rd Sustainability Bonds (unsecured straight bonds)

Eligible projects	GBP Category	SBP Category	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
Rebuilding of wards, etc. at JR Tokyo General Hospital	—	Access to essential service	JPY 29.8 billion	—	JPY 9.1 billion	JPY 0.7 billion
KAWASAKI DELTA	Green building	Affordable basic infrastructure		JPY 20 billion	—	—
Total amount				JPY 29.1 billion		JPY 0.7 billion

**<Social and environmental benefits>**

**1st Sustainability Bonds (unsecured straight bonds)**

DNV has confirmed that, as of December 2024, the projects in the table below are progressing smoothly as originally planned, and that introduced railcars are operating smoothly and the environmental benefits are being obtained.

Eligible projects	Social and environmental benefits		
	Category	Impact indicators	Achievement
E235 series railcars (Yokosuka/Sobu Rapid Line Service)	Common	Record of introducing railcars	Introduced: 83 railcars
	Green	Energy-saving by using VVVF inverter etc. (vs. conventional products)	19.8% energy-saving *1
		Energy-saving by using LED lighting (vs. conventional fluorescent lighting)	40% energy-saving
	Social	Number of railcars equipped with emergency power supplies	43 railcars
		Number of railcars with space for wheelchairs	83 railcars
		Number of railcars with barrier-free restrooms	83 railcars
AC Storage Battery-driven train EV-E801 series (Oga Line)	Common	Record of Introducing train cars	Introduced: 6 railcars
	Green	CO <sub>2</sub> emissions reduction (vs. conventional diesel trains)	60% reduction
		Exhaust gas reduction (vs. conventional diesel trains)	100% reduction
	Social	Noise reduction (vs. conventional diesel trains)	30 dB reduction
		Number of railcars with barrier-free restrooms	6 railcars

\*1 In the case of the Yamanote Line E235 series (energy consumption varies depending on the line section and running pattern)

**2nd Sustainability Bonds (unsecured straight bonds)**

DNV has confirmed that, as of December 2024, the projects in the table below are progressing smoothly as originally planned, and that the introduced railcars are operating smoothly. DNV has also confirmed that that the solar and wind power plants are operating smoothly, and the environmental benefits are being obtained.

Eligible projects	Social and environmental benefits		
	Category	Impact indicators	Achievement
E235 series railcars (Yokosuka/Sobu Rapid Line Service)	Common	Record of introducing railcars	Introduced: 83 railcars
	Green	Energy-saving by using VVVF inverter etc. (vs. conventional products)	19.8% energy-saving
		Energy-saving by using LED lighting (vs. conventional fluorescent lighting)	40% energy-saving
	Social	Number of railcars equipped with emergency power supplies	43 railcars

		Number of railcars with space for wheelchairs	83 railcars
		Number of railcars with barrier-free restrooms	83 railcars
Solar power generation	Green	FY2023 power generation (kWh) / Cumulative power generation (kWh)	7,788,794 kWh / 28,984,334 kWh
		FY2023 CO <sub>2</sub> reduction / Cumulative CO <sub>2</sub> reduction	2,991 t-CO <sub>2</sub> / 12,070 t-CO <sub>2</sub>
Wind power generation	Green	FY2023 power generation (kWh) / Cumulative power generation (kWh)	5,057,420 kWh / 17,651,810 kWh
		FY2023 CO <sub>2</sub> reduction / Cumulative CO <sub>2</sub> reduction	1,947 t-CO <sub>2</sub> / 8,123 t-CO <sub>2</sub>

### 3rd Sustainability Bonds (unsecured straight bonds)

DNV has confirmed that, as of December 2024, the rebuilding of wards, etc. at JR Tokyo General Hospital is progressing as originally planned. DNV has also confirmed that KAWASAKI DELTA has progressed and opened as planned, and that the social and environmental benefits are being obtained.

Eligible projects	Social and environmental benefits		
	Category	Impact indicators	Achievement
Rebuilding of wards, etc. at JR Tokyo General Hospital	Social	Total number of patients (inpatients and outpatients)	The Healthcare Wing (tentative name) opened in advance in April 2024 as "E-wing."
		Number of ambulances accepted	
		Equipment included in the new ward and the E-wing	The new ward (inpatient wing) is scheduled to open in the spring of 2025.
		National exams pass rate for nurses at the Higher Nursing School of JR Tokyo General Hospital	Reporting is scheduled to begin when the figures for the reporting indicators become available after the completion of the building.
KAWASAKI DELTA	Green	Type/rank of environmental certifications obtained: CASBEE-construction (new)	Rank S (expired in April 2024)
		Type/rank of environmental certifications obtained: BELS	5-Stars (ZEB* Ready / ZEB* Oriented)
		Primary energy consumption: Electricity (October 2023 – September 2024)	11,695,620 kWh
		Primary energy consumption: Gas (October 2023 – September 2024)	1,772,980 m <sup>3</sup>
		CO <sub>2</sub> emissions (October 2023 – September 2024)	7,453 t-CO <sub>2</sub>
	Social	Pedestrian network: Premises open to the public (inc. ground floor)	4,956 m <sup>2</sup>

\* ZEB ; net Zero Energy Building

## VI. Assessment Conclusion

On the basis of the information provided by JR East and the work undertaken, it is DNV's opinion that JR East meets the criteria established in the Protocol and that it is aligned with the stated definition or purpose of the Sustainability Bonds within the SBG, GBP/GBGL, and SBP/SBGL, which is to "enable capital-raising and investment for new and existing projects with social and environmental benefits."

DNV Business Assurance Japan K.K.

27 December 2024



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### 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.



#### Disclaimer

Responsibilities of the Management of the Fundraiser and the Second-Party Opinion Providers, DNV : The management of Fundraiser has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform the Fundraiser management and other interested stakeholders in the Bond 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 the Fundraiser. 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 the Fundraiser's management and used as a basis for this assessment were not correct or complete

## Schedule-1 Sustainability Bonds Allocation Projects

The sustainability projects listed in the table are eligible projects as described in the East Japan Railway Company Sustainability Bond Framework.

Eligible projects	GBP Category	SBP Category	Target population	Target Framework (Target Sustainability Bonds)			Contribution to SDGs
				Released 2019 (1st)	Released 2020 (2nd)	Released 2021 (3rd)	
E235 series railcars (Yokosuka/Sobu Rapid Line Service)	Clean transportation	Affordable basic infrastructure	All railway users including persons with disabilities, senior, pregnant, children, and families with children	○	○		Target 8, 11, 13
AC Storage Battery-driven train EV-E801 series (Oga Line)				○			
Solar power generation	Renewable energy	—	—		○		Target 8, 11, 13
Wind power generation		—	—		○		Target 8, 11, 13
Rebuilding of wards, etc. at JR Tokyo General Hospital	—	Access to essential service	All railway users including patients, healthcare professionals treating patients, and other vulnerable groups, including victims of natural disasters			○	Target 8, 11
KAWASAKI DELTA	Green building	Affordable basic infrastructure	All people including local companies and residents			○	Target 8, 11, 13



## Schedule-2 Sustainability Bonds Eligibility Assessment Protocol

The following checklists (1) to (4) are DNV's Sustainability Bonds Eligibility Assessment Protocol created for JR East based on the requirements of SBG, GBP, SBP, and GBGL. The "Confirmed documents" in the work undertaken include internal documents of JR East and are provided by JR East as evidence of eligibility judgement for DNV.

The East Japan Railway Company Sustainability Finance Framework and related legal documents described in the table are separately disclosed as explanatory materials for investors.

### (1) Use of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Type of bond	<p>The Sustainability Bonds must fall in one of the following categories, as defined by SBP and GBP.</p> <ul style="list-style-type: none"> <li>- (Standard) Sustainability Bond</li> <li>- Sustainability Revenue Bond</li> <li>- Sustainability Project Bond</li> <li>- Sustainability Security Bond</li> </ul>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- East Japan Railway Company Sustainability Bond Framework (hereinafter, the "Framework")</li> </ul> <p>Interviews with JR East</p>	<p>Through the documentation review and consultation, DNV has confirmed that JR East's Sustainability Bonds fall into the following categories:</p> <p>(Standard) Sustainability Bond</p>
1b	Project Categories	<p>The cornerstone of the Sustainability Bonds is the utilization of the proceeds of the finance which should be appropriately described in the legal documentation for the security.</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> <p>Interviews with JR East</p>	<p>DNV has confirmed that the proceeds have been allocated to the following projects:</p> <p>&lt;E235 series railcars (Yokosuka/Sobu Rapid Line Service)&gt;</p> <ul style="list-style-type: none"> <li>- Green: Clean transportation (overall rail transportation)</li> <li>- Social: Affordable basic infrastructure (railcars)</li> </ul> <p>&lt;AC Storage Battery-driven train EV-E801 series (Oga Line)&gt;</p> <ul style="list-style-type: none"> <li>- Green: Clean transportation (overall rail transportation)</li> <li>- Social: Affordable basic infrastructure (railcars)</li> </ul> <p>&lt;Solar power generation&gt;</p> <ul style="list-style-type: none"> <li>- Green: Renewable energy</li> </ul> <p>&lt;Wind power generation&gt;</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<ul style="list-style-type: none"> <li>- Green: Renewable energy</li> </ul> <Rebuilding of wards, etc. at JR Tokyo General Hospital> <ul style="list-style-type: none"> <li>- Social: Access to essential service</li> </ul> <KAWASAKI DELTA> <ul style="list-style-type: none"> <li>- Green: Green building</li> <li>- Social: Affordable basic infrastructure (pedestrian network), Socioeconomic improvement and empowerment</li> </ul>
1c	Environmental and social benefits	All designated Sustainability Project categories should provide clear greenly and/or social benefits, which, where feasible, will be quantified or assessed by the fundraiser.	Confirmed documents: <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> Interviews with JR East	DNV has confirmed that the green projects contribute to the reduction of CO <sub>2</sub> emissions from railway operations. As for the sustainability project, DNV assessed it as having sufficient benefits to improve social issues as it enhances the convenience of public transportation (railways) for a wide range of railway users, including the elderly and wheelchair users, taking into account the background to the enactment of the relevant legislation (the Barrier Free Act) and the actual implementation state of accessible/universal design.
1d	Refinancing share	In the event that a proportion of the proceeds may be used for refinancing, it is recommended that fundraiser provide an estimate of the share of financing vs. refinancing, and where appropriate, also clarify which investments or project portfolios may be refinanced.	Confirmed documents: <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> Interviews with JR East	DNV has confirmed that JR East had used most of the net proceeds for both new investments and refinancing for one or more of the eligible projects at the end of September 2024. DNV has also confirmed that JR East intends to identify, through reporting (annual reporting), the estimated amount of the portion of the proceeds allocated to refinancing.



## (2) Process for Project Evaluation and Selection

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Investment decision process	<p>The fundraiser of the Sustainability Bonds should outline the decision-making process it follows to determine the eligibility of projects using Sustainability Bonds proceeds. This includes, without limitation:</p> <ul style="list-style-type: none"> <li>• A process to determine how the projects fit within the eligible Sustainability (Green and Social) Projects categories identified in the Sustainability Bonds Principles;</li> <li>• The criteria making the projects eligible for using the Sustainability Bonds proceeds; and</li> <li>• The sustainability objectives for green and social</li> </ul>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> <p>Interviews with JR East</p>	<p>DNV has confirmed that JR East has selected eligible projects for the Sustainability Bonds etc. in accordance with the Framework and internal regulations. Specifically, the procedure is as follows:</p> <ul style="list-style-type: none"> <li>- The Finance &amp; Investment Planning Department selects eligible projects and the Director in charge of Finance &amp; Investment Planning gives approvals.</li> <li>- In assessing the eligibility of the projects, a comprehensive analysis and review of financial aspects, technical and operational aspects, market environment, and ESG risks should be undertaken.</li> </ul>
2b	Fundraiser's environmental and social governance framework	<p>In addition to criteria and certifications, the information published by fundraiser regarding the Sustainability Bonds process is also considered the quality of performance of the fundraiser's framework and environmental and social sustainability.</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> <p>Interviews with JR East</p>	<p>DNV has confirmed, through the documentation review and interviews, that the planned Sustainability Bonds etc. are in line with JR East's business and environmental initiatives such as "Move Up" 2027, the "Energy Vision 2027 – Connect," "Zero Carbon Challenge 2050," etc., and are closely related to the business and environmental sustainability.</p>



### (3) Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure-1	Proceeds for funds raised through the Sustainability Bonds should be managed in sub-accounts, incorporated into sub-portfolios, or tracked by other appropriate means. They should also be evidenced by the fundraiser in a formal internal process related to the fundraiser's investment and financing operations for sustainability projects.	Confirmed documents: - Framework - Assessment documentation Interviews with JR East	DNV has confirmed that JR East managed the proceeds from the Sustainability Bonds in cash or cash equivalents, and that the allocation status is managed by the Finance & Investment Planning Department on a quarterly basis until the proceeds are fully allocated. The system for managing the allocation status is stipulated in the internal document.
3b	Tracking procedure-2	In the period for which the Sustainability Bonds is to be managed, the balance of the tracked proceeds should be periodically adjusted by amounts matching eligible project investments or loan disbursements made during that period.	Confirmed documents: - Framework - Assessment documentation Interviews with JR East	DNV has confirmed that the allocation status of proceeds (allocated amount and balance) is managed and adjusted according to the above procedure. DNV has also confirmed that JR East uses the codes registered in the accounting system to manage expenditure on eligible projects, track the allocation status of proceeds in a separate spreadsheet, and manages the unallocated and allocated proceeds on a quarterly basis using a balance sheet.
3C	Temporary holdings	Pending such investments or disbursements to eligible Sustainability Projects, the fundraiser should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	Confirmed documents: - Framework - Assessment documentation Interviews with JR East	DNV has confirmed that JR East has disclosed the allocation status of proceeds on its website on an annual basis until the proceeds of the Sustainability Bonds etc. are fully allocated. The disclosure includes the amount of allocated proceeds on a project-by-project basis, the allocated amount of proceeds, and the amount allocated to refinancing. DNV has also confirmed that the progress of the project and the social and environmental benefits are published on its website on an annual basis until the reimbursement is completed.

#### (4) Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Periodical reporting	<p>In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, fundraisers should provide at least annually a list of projects to which the Sustainability Bonds proceeds have been allocated including:</p> <ul style="list-style-type: none"> <li>• confidentiality and/or competitive considerations, where possible;</li> <li>• a brief description of the projects and the amounts disbursed, as well as the expected environmental and social sustainable impact</li> </ul>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- Assessment documentation</li> </ul> <p>Interviews with JR East</p>	<p>DNV has confirmed that JR East plans to organize each time of issuance and report annually on the allocation status of proceeds from the Sustainability Bonds etc. until the proceeds are fully allocated, and the social and environmental benefits until the reimbursement.</p> <p>The reporting discloses the following information as far as practicable per eligible project category or per eligible project:</p> <p><b>【Allocation status】</b></p> <ul style="list-style-type: none"> <li>- Allocated amount</li> <li>- Unallocated amount</li> <li>- Refinancing amount</li> </ul> <p><b>【Impact reporting】</b></p> <p>&lt;Green projects&gt;</p> <ul style="list-style-type: none"> <li>- Record of introducing trains, storage battery-driven trains, or hybrid railcars.</li> <li>- Energy-saving by using VVVF inverter etc. (designed value)</li> <li>- Details of R&amp;D investment (railcars)</li> <li>- Details of maintenance, renovation, and renewal of equipment essential for railway operations, and disaster countermeasures (railway facilities)</li> <li>- Overview of renewable energy project (project name, location, output capacity in kW, CO<sub>2</sub> reductions)</li> <li>- Overview of green eligible building</li> <li>- Type/rank of environmental certifications obtained</li> <li>- Primary energy consumption, CO<sub>2</sub> emissions etc.</li> </ul> <p>&lt;Social projects&gt;</p> <ul style="list-style-type: none"> <li>- Record of introducing railcars</li> <li>- Total number of patients (inpatients and outpatients)</li> </ul>



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<ul style="list-style-type: none"><li>- Number of ambulances accepted</li><li>- Equipment included in the new ward and the Healthcare Wing</li><li>- National exams pass rate for nurses at the Higher Nursing School of JR Tokyo General Hospital</li><li>- Number of railcars with wheelchair spaces and barrier-free spaces</li><li>- Number of stations with platform doors, barrier-free restrooms, and elevators</li><li>- Overview of pedestrian network facilities etc.</li></ul>