



SECOND PARTY OPINION

EAST JAPAN RAILWAY COMPANY GREEN BOND (1ST, 2ND & 3RD, AND 4TH EURO-DENOMINATED AND 1ST POUND- DENOMINATED BONDS) POST-ISSUANCE PERIODIC REVIEW

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Revision History

Revision number	Date of Issue	Remarks
0	27 December 2023	Initial
1	27 December 2024	Periodic review in FY2024 Update on the allocation status of proceeds and the environmental and social benefits related to the following Green Bonds: - 1st Euro-denominated Green Bond (unsecured straight bond) - 2nd & 3rd Euro-denominated Green Bonds (unsecured straight bonds) - 4th Euro-denominated Green Bond (unsecured straight bond) and 1st Pound-denominated Green Bond (unsecured straight bond)

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 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)

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 Green Bonds (1st, 2nd & 3rd, and 4th Euro-denominated Green Bonds and 1st Pound-denominated Green Bond, 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 Green Bond Principles (ICMA 2021, “GBP”), the Green Bond Guidelines (Ministry of the Environment 2022, “GBGL”), and the EU Taxonomy (European Commission), and to provide a second party opinion on the eligibility of these Bonds.

JR East issued the 1st Euro-denominated Green Bonds (unsecured straight bonds) of EUR 750 million (JPY 107.1 billion) on 22 February 2023, the 2nd & 3rd Green Bonds (unsecured straight bonds) of EUR 600 million (JPY 95 billion) and EUR 700 million (JPY 110.9 billion) each, for a total of EUR 1,300 million (JPY 206 billion) on 5 September 2023, and the 4th Euro-denominated Green Bond (unsecured straight bond) of EUR 700 million (JPY 112.7 billion) and the 1st Pound-denominated Green Bond (unsecured straight bond) of EUR 600 million (JPY 114.6 billion) on 4 September 2024. DNV conducted a periodic review for the period from the latest periodic review to November 2024 based on the GBP, GBGL, and the EU Taxonomy.

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 Green Bonds, the value of any investment in the Green Bonds, or the long-term environmental benefits of the transaction.

Standards/guidelines to be applied

No.	Standards/Guidelines	Scheme owner	Applied level ^{*1*2}
1.	Green Bond Principles	International Capital Market Association (ICMA), 2021	Apply
2.	Green Bond Guidelines	Ministry of the Environment, 2022	Apply
3.	EU Taxonomy (Transportation) (Energy) ^{*3}	European Commission	Apply

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

*2 Refer: The relevant contents were partially considered based on the project and execution plan of the Green Bond.

*3 EU Taxonomy criteria “Transportation” (Activity number 6.1 “Passenger interurban rail transport,” 3.19 “Manufacture of rail rolling stock constituents,” and 6.14 “Infrastructure for rail transport”) and “Energy” (Activity number 4.1 “Electricity generation using solar photovoltaic technology” and 4.3 “Electricity generation from wind power”)



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 Green Bonds assessment methodology, which incorporates the requirements of the GBP and GBGLs to create a Green Bonds Eligibility Assessment Protocol (hereinafter, "DNV's Protocol"). Please refer to Schedule-2.

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 Green Bonds should "enable capital-raising and investment for new and existing projects with environmental benefits."

As per our Protocol, the criteria against which the Green 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 Green 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 Green Bonds issuer should outline the process it follows when determining eligibility of an investment using Green 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 Green 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 Green Bonds (* not included in this report)

- Creation of a JR East specific Protocol, adapted to the purpose of the Green 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 Green Bonds *This Report

- Assessment of evidential documents provided by JR East after issuance of the Green 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 a part of the net proceeds out of the proceeds from these Bonds (JPY 538.5 billion) to the eligible projects^{*1} described in Schedule-1.

- *1 Eligible projects are those that meet the eligibility criteria of the "East Japan Railway Company Sustainability Finance Framework" developed by JR East. Please see the "East Japan Railway Company Green Bond ANNEX - Second Party Opinion" for details of the projects.

East Japan Railway Company Sustainability Finance Framework:

https://www.jreast.co.jp/e/investor/sustainable-finance/pdf/sustainabilityfinance_framework_en.pdf

East Japan Railway Company Green Bond ANNEX - Second Party Opinion:

[1st Euro-denominated Green Bond](#)

[2nd & 3rd Euro-denominated Green Bonds](#)

[4th Euro-denominated Green Bond and 1st Pound-denominated Green Bond](#)

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 CO₂ 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 Green 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 1 to 3 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 that JR East had allocated a part of the net proceeds from these Bonds to each eligible project as planned by November 2024. DNV has also confirmed that, as of 30 September 2024, the unallocated proceeds of the 2nd & 3rd Euro-denominated Green Bonds (JPY 30.8 billion) and the 4th Euro-denominated Green Bond and the 1st Pound-denominated Green Bond (JPY 65.6 billion) were managed in cash.

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

Principle Four: Reporting

DNV has confirmed that JR East plans to disclose the allocation status of proceeds and the 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 environmental benefits will be reported until the redemption of these Bonds.

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

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

<Allocation status>

1st Euro-denominated Green Bonds (unsecured straight bonds)

DNV has confirmed that the net proceeds from the 1st Euro-denominated Green Bond (unsecured straight bond) have been fully allocated to eligible projects as planned, as shown in Table-1.

Table-1 1st Euro-denominated Green Bond (unsecured straight bond)

Eligible projects	GBP Category	EU Taxonomy	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
Train cars (Shinkansen Series E7 train)	Clean transportation	No. 6.1 Passenger interurban rail transport	JPY 106.7 billion	JPY 66.6 billion	—	—
Railway facilities (to increase and maintain the resilience of railway)	Clean transportation Climate change adaptation	No. 6.14 Infrastructure for rail transport		JPY 25.2 billion	JPY 14.9 million	—
Total amount				JPY 106.7 billion		—

2nd & 3rd Euro-denominated Green Bonds (unsecured straight bonds)

DNV has confirmed that a part of the net proceeds from the 2nd & 3rd Euro-denominated Green Bonds (unsecured straight bonds) was allocated to eligible projects as planned, and that the unallocated proceeds (JPY 30.8 billion) were managed in cash, as shown in Table-2.

Table-2 2nd & 3rd Euro-denominated Green Bonds (unsecured straight bonds)

Eligible projects	GBP Category	EU Taxonomy	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
Train cars (Shinkansen Series E5 train and E8 train)	Clean transportation	No. 6.1 Passenger interurban rail transport	JPY 205.3 billion	JPY 31.5 billion	JPY 15.6 billion	JPY 30.8 billion
Train cars (Conventional railcars Series E235, E131, E233 trains)				JPY 46.3 billion	JPY 22.1 billion	
Railway facilities (to increase and maintain the resilience of railway)	Clean transportation Climate change adaptation	No. 6.14 Infrastructure for rail transport		JPY 28.8 billion	JPY 13.3 billion	
Solar power generation	Renewable energy	No. 4.1 Electricity generation using solar		JPY 11.3 billion	JPY 5.4 billion	

		photovoltaic technology				
Wind power generation		No. 4.3 Electricity generation from wind power				
Total amount				JPY 174.5 billion		JPY 30.8 billion

4th Euro-denominated Green Bond (unsecured straight bond) and 1st Pound-denominated Green Bond (unsecured straight bond)

DNV has confirmed that a part of the net proceeds from the 4th Euro-denominated Green Bond (unsecured straight bond) and the 1st Pound-denominated Green Bond (unsecured straight bond) was allocated to eligible projects as planned, and that the unallocated proceeds (JPY 65.6 billion) were managed in cash, as shown in Table-3.

A part of the Kurikoyama Wind Power Project (tentative name), which is classified as renewable energy, was determined to be cancelled due to the challenges of its feasibility in September 2024. DNV has confirmed that JPY 0.5 billion already allocated to this eligible project has been reallocated to other eligible projects and remains an appropriate use of the Green Bond proceeds.

Table-3 4th Euro-denominated Green Bond (unsecured straight bond) and 1st Pound-denominated Green Bond (unsecured straight bond)

Eligible projects	GBP Category	EU Taxonomy	Amount of proceeds	Allocated amount		Unallocated amount
				Refinancing	New investment	
Train cars (Shinkansen Series E8 train)	Clean transportation	No. 6.1 Passenger interurban rail transport	JPY 226.4 billion	JPY 0.5 billion	—	JPY 65.6 billion
Train cars (Conventional railcars Series E235, E233 trains)				JPY 23.9 billion	—	
Shinkansen modification (equipped with bogie monitoring system)		No. 3.19 Manufacture of rail rolling stock constituents		JPY 8.7 billion	—	
Railroad facilities (investments and expenses for maintenance,	Clean transportation Climate change adaptation	No. 6.14 Infrastructure for rail transport		JPY 122.4 billion (Opex: JPY 46.6 billion)	—	

renovation, and renewal)						
Soler power generation	Renewable energy	No. 4.1 Electricity generation using solar photovoltaic technology		JPY 5.1 billion	—	
Wind power generation		No. 4.3 Electricity generation from wind power				
Total amount				JPY 160.8 billion		JPY 65.6 billion

<Environmental benefits>

Eligible projects	1st Euro- denominated Green Bond	2nd & 3rd Euro- denominated Green Bonds	4th Euro- denominated Green Bond and 1st Pound- denominated Green Bond	Environmental benefits
Train cars (Shinkansen Series E7 train)	○			Results of introducing railcars Series E7: 20 railcars
Train cars (Shinkansen Series E5 train)		○		Results of introducing railcars Series E5: 6 railcars
Train cars (Shinkansen Series E8 train)		○	○	Results of introducing railcars Series E8: 6 railcars
Train cars (Conventional railcars Series E131 train)		○		Results of introducing railcars Series E131: 35 railcars
Train cars (Conventional railcars Series E235, E233 trains)		○	○	Results of introducing railcars Series E235: 83 railcars Series E233: 1 railcar
Shinkansen modification (equipped with bogie monitoring system)			○	Results of railcars modification Completed: 37 railcars in operation
Railway facilities (to increase and maintain the	○ (Shinkansen railways)	○ (Shinkansen & conventional railways)		Details of disaster countermeasures for railway facilities and progress of projects

resilience of railway)				Seismic reinforcement of railway facilities 5,605 elevated bridge pillars
Railroad facilities (investments and expenses for maintenance, renovation, and renewal)			○	Details of maintenance, renovation, and renewal of railway facilities (FY2022) Rail replacement: 341 km Extension of overhead wire replacement: 186 km
Solar power generation		○	○	Power generation by power plants in operation ^{*1} : 113,974,821 kWh/year CO ₂ reduction rate (FY2023) ^{*3} : 49,921 t-CO ₂ /year
Wind power generation		○	○	Power generation by power plants in operation ^{*2} : 36,589,452 kWh/year CO ₂ reduction rate (FY2023) ^{*3} : 16,026 t-CO ₂ /year

*1 Location and total equipment capacity of power plants already in operation: 135.2 MW (Tomioka Revitalization Mega Solar Plant SAKURA, Daigo Solar Power Plant, Ichikai Solar Power Plant, Morioka Tamayama Solar Power Plant, etc.)

*2 Location and total equipment capacity of power plants already in operation: 21.8 MW (Nishime-Nishinosawa Wind Power Plant, Mitane Wind Power Plant, Minehama Wind Power Plant)

*3 CO₂ reduction rate = "Power generation by power plants in operation" × "Percentage of contribution" × "CO₂ emission factor"

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 Green Bonds within the GBP and GBGL, which is to "enable capital-raising and investment for new and existing projects with 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 Green Bonds Allocation Projects

1st Euro-denominated Green Bond (unsecured straight bond)

No.	Green eligible projects		Project overview	
	Category	Sub Category		
1	Clean transportation	Overall rail transportation	Project: Train cars (Shinkansen Series E7 train)	
			EU Taxonomy (Sector 6, Transport)	<ul style="list-style-type: none">Train cars (Shinkansen Series E7 train) are direct zero emission railcars, which meet climate mitigation criteria of "Passenger interurban rail transport" in EU Taxonomy 6.1.The proceeds have been allocated to manufacturing Shinkansen Series E7 trains (the latest series with improved safety and comfortability), which will be operated at the Joetsu and Hokuriku Shinkansen line (from Tokyo to Niigata (Joetsu), and to Kanazawa (Hokuriku)), and purchasing of equipment.<ul style="list-style-type: none">➤ DNV has confirmed that the introduction of railcars had completed as planned.
			6.1 "Passenger interurban rail transport"	
2	Clean transportation		Project: Railway facilities (to increase and maintain the resilience of railway)	
			EU Taxonomy (Sector 6, Transport)	

No.	Green eligible projects		Project overview	
	Category	Sub Category		
	Climate change adaptation		6.14 "Infrastructure for rail transport"	<ul style="list-style-type: none"> • Railway facilities are essential for economic activity to increase (reinforce) and maintain the resilience against natural disasters within the operation area of direct zero emission trains of JR East, which meet climate mitigation criteria of "Infrastructure for rail transport" in EU Taxonomy 6.14. • The proceeds will be allocated to civil engineering, construction work, and purchasing of equipment of railways of Shinkansen. ➤ DNV has confirmed that the project is progressing as planned.

2nd & 3rd Euro-denominated Green Bonds (unsecured straight bonds)

No.	Green eligible projects		Project overview	
	Category	Sub Category		
1	Clean transportation	Overall rail transportation	Project: Train cars (Shinkansen Series E5, E8 and conventional railcars Series E235, E131, E233 trains)	
			EU Taxonomy (Sector 6, Transport)	<ul style="list-style-type: none"> • Train cars (Shinkansen Series E5, E8 and conventional railcars Series E235, E131, E233 trains) are direct zero emission railcars, which meet climate mitigation criteria of “Passenger interurban rail transport” in EU Taxonomy 6.1. • The proceeds will be allocated to manufacturing of the following railcars and purchasing of equipment: <ul style="list-style-type: none"> - Shinkansen Series E5 train, which will be operated at Tohoku and Hokkaido Shinkansen line (from Tokyo to Shin-Aomori (Tohoku) and Shin-Hakodate-Hokuto (Hokkaido)), and Shinkansen Series E8 train (the latest series with improved safety and comfortability), which will be operated at Yamagata Shinkansen line (from Tokyo to Shinjo (Yamagata)) ➤ DNV has confirmed that the introduction of the Series E5 and E8 trains is progressing as planned. - Conventional railcars Series E235 train, which will be operated in the Tokyo metropolitan area, Series E131 train, which will be operated in suburban areas of the Tokyo metropolitan area, and Series E233
			6.1 “Passenger interurban rail transport”	

No.	Green eligible projects		Project overview	
	Category	Sub Category		
				<p>train, which will be operated in the Tokyo metropolitan area and its suburbs.</p> <ul style="list-style-type: none"> ➤ DNV has confirmed that the introduction plans for the Series E235, E131, and E233 are progressing smoothly.
2	Clean transportation Climate change adaptation		Project: Railway facilities (to increase and maintain the resilience of railway)	
			EU Taxonomy (Sector 6, Transport)	<ul style="list-style-type: none"> • Railway facilities are essential for economic activity to increase (reinforce) and maintain the resilience against natural disasters within the operation area of direct zero emission trains of JR East, which meet climate mitigation criteria of “Infrastructure for rail transport” in EU Taxonomy 6.14. • The proceeds will be allocated to civil engineering, construction work, and purchasing of equipment of railways of Shinkansen and conventional railways. ➤ DNV has confirmed that the project is progressing as planned.
			6.14 “Infrastructure for rail transport”	

No.	Green eligible projects		Project overview	
	Category	Sub Category		
3	Renewable energy	Solar power generation Wind power generation	Project: Solar power generation	
			EU Taxonomy (Sector 4, Energy)	<ul style="list-style-type: none"> • Solar power generation is the activity generates electricity using solar PV technology, which meets climate mitigation criteria of “Electricity generation using solar photovoltaic technology” in EU Taxonomy 4.1. • The proceeds will be allocated and managed by adopting a portfolio management approach. Specifically, the proceeds will be allocated and managed as part of the investment in several solar power plants, including those already in operation and under construction, invested by JR East Energy Development Co., Ltd., a consolidated subsidiary to which JR East provides loans through its cash management system. ➤ DNV has confirmed that the power plants that have already started operation are operating smoothly and that the environmental benefits are being obtained. DNV has also confirmed that the power plants under construction are progressing smoothly as planned toward the start of operation.
4			Project: Wind power generation	
			EU Taxonomy (Sector 4, Energy)	

No.	Green eligible projects		Project overview	
	Category	Sub Category		
			4.3 "Electricity generation from wind power"	<ul style="list-style-type: none"> • Wind power generation is the activity generates electricity from wind power, which meets climate mitigation criteria of "Electricity generation from wind power" in EU Taxonomy 4.3. • The proceeds will be allocated and managed by adopting a portfolio management approach. Specifically, the proceeds will be allocated and managed as part of the investment in several wind power plants, including those already in operation and under construction, invested by JR East Energy Development Co., Ltd., a consolidated subsidiary to which JR East provides loans through its cash management system. ➤ DNV has confirmed that the power plants that have already started operation are operating smoothly and that the environmental benefits are being obtained. DNV has also confirmed that the power plants under construction are progressing smoothly as planned toward the start of operation.

4th Euro-denominated Green Bond (unsecured straight bond) and 1st Pound-denominated Green Bond (unsecured straight bond)

No.	Green eligible projects		Project overview	
	Category	Sub Category		
1	Clean transportation	Overall rail transportation	Project: Train cars (Shinkansen Series E8 train)	
			EU Taxonomy (Sector 6, Transport)	<ul style="list-style-type: none">Train cars (Shinkansen Series E8 train) are direct zero emission railcars, which meet climate mitigation criteria of “Passenger interurban rail transport” in EU Taxonomy 6.1.The proceeds have been allocated to manufacturing of the railcars of the Shinkansen Series E8 train (the latest series with improved safety and comfortability), which will be operated at Yamagata Shinkansen line (from Tokyo to Shinjo (Yamagata)), and purchasing of equipment.<ul style="list-style-type: none">➤ DNV has confirmed that the introduction plans for the Series E8 train is progressing smoothly.
			6.1 “Passenger interurban rail transport”	
2			Project: Train cars (Conventional railcars Series E235, E233 trains)	
			EU Taxonomy (Sector 6, Transport)	<ul style="list-style-type: none">Train cars (Conventional railcars Series E235, E233 trains) are direct zero emission railcars, which meet climate mitigation criteria of “Passenger interurban rail transport” in EU Taxonomy 6.1.The proceeds have been allocated to manufacturing of the railcars of the conventional railcars Series E235 used in the Tokyo metropolitan area and the conventional railcars Series E233 used in the Tokyo metropolitan area and its suburbs, and purchasing of equipment.
			6.1 “Passenger interurban rail transport”	

No.	Green eligible projects		Project overview	
	Category	Sub Category		
				➤ DNV has confirmed that the introduction of the conventional railcars Series E235, E233 trains is progressing as smoothly.
3			Project: Train cars (Shinkansen modification (equipped with bogie monitoring system))	
			EU Taxonomy (Sector 3, Manufacturing)	• Train cars (Shinkansen modification (equipped with bogie monitoring system)) is a project classified as “Clean transportation” in GBP2021 and “Manufacture of rail rolling stock constituents” in EU Taxonomy 3.19.
			3.19 “Manufacture of rail rolling stock constituents”	• Specifically, it is the installation of essential equipment for the safe and stable transportation of railcars with zero direct emissions that meet the climate mitigation criteria in the EU Taxonomy described above. ➤ DNV has confirmed that the project is progressing as planned and modified railcars are in operation.
4	Clean transportation Climate change adaptation		Project: Railroad facilities (investments and expenses for maintenance, renovation, and renewal)	
			EU Taxonomy (Sector 6, Transport)	• Railroad facilities (investments and expenses for maintenance, renovation, and renewal) is a project classified as “Clean transportation” and “Climate change adaptation” in GBP2021, and “Infrastructure for rail transport” in EU Taxonomy 6.14.
			6.14 “Infrastructure for rail transport”	• Specifically, DNV has confirmed that JR East's maintenance and management of train operation areas with zero direct emissions is an essential project for ensuring safe and stable transportation, both in normal times and during natural disasters (e.g., typhoons), and meets the

No.	Green eligible projects		Project overview	
	Category	Sub Category		
				<p>climate mitigation and adaptation criteria in the EU Taxonomy described above.</p> <ul style="list-style-type: none"> The proceeds will be allocated to maintenance, renovation, and renewal (Capex) and expenses (Opex) of Shinkansen and conventional rail facilities, including replacement and repair (e.g., rail replacement and overhead wire replacement). <ul style="list-style-type: none"> ➤ DNV has confirmed that the project is progressing smoothly as planned.
5	Renewable energy	Solar power generation Wind power generation	Project: Solar power generation	
			EU Taxonomy (Sector 4, Energy)	<ul style="list-style-type: none"> Solar power generation is the activity generates electricity using solar PV technology, which meets climate mitigation criteria of “Electricity generation using solar photovoltaic technology” in EU Taxonomy 4.1.
			4.1 “Electricity generation using solar photovoltaic technology”	<ul style="list-style-type: none"> The proceeds will be allocated and managed by adopting a portfolio management approach. Specifically, the proceeds will be allocated and managed as part of the investment in several solar power plants, including those already in operation and under construction, invested by JR East Energy Development Co., Ltd., a consolidated subsidiary to which JR East provides loans through its cash management system. <ul style="list-style-type: none"> ➤ DNV has confirmed that the power plants that have already started operation are operating smoothly and that the environmental benefits are being obtained. DNV has also confirmed that the

No.	Green eligible projects		Project overview	
	Category	Sub Category		
				power plants under construction are progressing smoothly as planned toward the start of operation.
6			Project: Wind power generation	
			EU Taxonomy (Sector 4, Energy)	<ul style="list-style-type: none"> • Wind power generation is the activity generates electricity from wind power, which meets climate mitigation criteria of “Electricity generation from wind power” in EU Taxonomy 4.3. • The proceeds will be allocated and managed by adopting a portfolio management approach. Specifically, the proceeds will be allocated and managed as part of the investment in several wind power plants, including those already in operation and under construction, invested by JR East Energy Development Co., Ltd., a consolidated subsidiary to which JR East provides loans through its cash management system. <ul style="list-style-type: none"> ➤ DNV has confirmed that the power plants that have already started operation are operating smoothly and that the environmental benefits are being obtained. DNV has also confirmed that the power plants under construction are progressing smoothly as planned toward the start of operation.
			4.3 “Electricity generation from wind power”	



Schedule-2 Green Bonds Eligibility Assessment Protocol

The following checklists (GBP-1 to GBP-4) are DNV's Green Bonds Eligibility Assessment Protocol created for JR East based on the requirements of GBP and GBGLs. 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.

GBP-1 Use of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Type of bond	<p>The bond must fall in one of the following categories, as defined by the Green Bond Principles:</p> <ul style="list-style-type: none"> Green Use of Proceeds Bond Green Use of Proceeds Revenue Bond Green Project Bond Other 	<p>Confirmed documents:</p> <ul style="list-style-type: none"> East Japan Railway Company Sustainability Finance Framework (hereinafter, the "Framework") <p>Interviews with JR East</p>	<p>Through the evaluation process, DNV has confirmed that JR East's Green Bonds fall into the following categories:</p> <p>Green Use of Proceed Bond</p>
1b	Green Project Categories	<p>The cornerstone of a Green Bond is the utilization of the proceeds of the bond which should be appropriately described in the legal documentation for the security.</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> Framework Assessment documentation <p>Interviews with JR East</p>	<p>DNV has confirmed that the proceeds had been allocated to the following projects:</p> <p><Clean transportation></p> <ul style="list-style-type: none"> - Train cars (Shinkansen Series E7 train) - Train cars (Shinkansen Series E5, E8 and conventional railcars Series E235, E131, E233 trains) - Shinkansen modification (equipped with bogie monitoring system) <p><Clean transportation and Climate change adaptation></p> <ul style="list-style-type: none"> - Railway facilities (to increase and maintain the resilience of railway of Shinkansen and conventional railways) - Railroad facilities (investments and expenses for maintenance, renovation, and renewal)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<Renewable energy> <ul style="list-style-type: none"> - Solar power generation - Wind power generation
1c	Environmental benefits	All designated Green Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the issuer.	Confirmed documents: <ul style="list-style-type: none"> • Framework • Assessment documentation Interviews with JR East	DNV has confirmed that the green project will contribute to the reduction of CO ₂ emissions associated with railroad operations.
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.	Confirmed documents: <ul style="list-style-type: none"> • Framework • Assessment documentation 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.

GBP-2 Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Investment-decision process	<p>The issuer of a Green Bond should outline the decision-making process it follows to determine the eligibility of projects using Green Bond proceeds. This includes, without limitation:</p> <ul style="list-style-type: none"> • A process to determine how the projects fit within the eligible Green Projects categories identified in the Green Bond Principles; • The criteria making the projects eligible for using the Green Bond proceeds; and • • The environmental sustainability objectives 	<p>Confirmed documents:</p> <ul style="list-style-type: none"> • Framework • Assessment documentation <p>Interviews with JR East</p>	<p>DNV has confirmed that JR East has selected eligible projects for the Green Bonds in accordance with the Framework and internal regulations. Specifically, the procedure is as follows:</p> <ul style="list-style-type: none"> – The Finance & Investment Planning Department selects eligible projects and the Director in charge of Finance & Investment Planning gives approvals. – 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.
2b	Issuer's environmental and social and governance framework	<p>In addition to information disclosed by an issuer on its Green Bond process, criteria and assurances, Green Bond investors may also take into consideration the quality of the issuer's overall framework and performance regarding environmental sustainability.</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> • Framework • Assessment documentation • Website <p>Interviews with JR East</p>	<p>DNV has confirmed, through the documentation review etc., that the planned Green Bonds 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>

GBP-3 Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure-1	The net proceeds of Green 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 Green Projects.	Confirmed documents: <ul style="list-style-type: none"> • Framework • Assessment documentation Interviews with JR East	DNV has confirmed that JR East managed the proceeds from the Green 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	So long as the Green Bonds are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible green investments or loan disbursements made during that period.	Confirmed documents: <ul style="list-style-type: none"> • 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 Green Projects, the issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	Confirmed documents: <ul style="list-style-type: none"> • 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 Green Bonds 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 environmental benefits are published on its website on an annual basis until the allocation is completed.

GBP-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, issuers should provide at least annually a list of projects to which Green 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 sustainable impact. 	<p>Confirmed documents:</p> <ul style="list-style-type: none"> • Framework • Assessment documentation <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 Green Bonds and environmental benefits until the proceeds are fully allocated.</p> <p>The reporting discloses the following information as far as practicable per eligible project category or per eligible project:</p> <p>【Allocation status】</p> <ul style="list-style-type: none"> - Allocated amount - Unallocated amount - Refinancing amount <p>【Environmental benefits】</p> <ul style="list-style-type: none"> - Results of introducing railcars, storage battery-driven trains, or hybrid railcars - Details of maintenance, renovation, and renewal of equipment essential for railway operations, and disaster countermeasures (railway facilities) - Overview of renewable energy project (project name, location, output capacity in kW, CO₂ reductions)