# East Japan Railway Company ("JR East") Sustainability Finance Framework

#### 1. Introduction

JR East has designed its Sustainability Finance Framework ("the Framework") in compliance with the Green Bond Principles ("GBP") 2021 published by the International Capital Market Association ("ICMA"), the Social Bond Principles ("SBP") 2021 by ICMA, the Sustainability Bond Guidelines ("SBG") 2021 by ICMA, the Green Bond Guidelines 2022 published by the Ministry of the Environment of Japan, the Social Bond Guidelines 2021 published by Financial Services Agency, the Green Loan Principles ("GLP") 2021 and the Social Loan Principles ("SLP") 2021 published by the Loan Market Association ("LMA"), the Asia- Pacific Loan Market Association ("APLMA") and the Loan Syndications & Trading Association ("LSTA"), and the Green Loan Guidelines 2022 published by the Ministry of the Environment of Japan. It has received opinion by DNV Business Assurance Japan on the compliance of the Framework with such standards. In accordance with this framework, JR East may execute Sustainability Finance (as defined in "2. Sustainability Finance Framework").

In this Framework, references to the "Group" or our "Group" are to JR East and its consolidated subsidiaries taken as a whole.

#### 1.1 Overview of the Company

The Group's and its affiliates' business activities include "Transportation", "Retail and Services", "Real Estate and Hotels", and "Others". Business positioning of the Group and its affiliates are as follows:

### Transportation:

This business segment includes passenger transportation operations centered around railway operations, as well as travel agency services, cleaning services, railway station operations, facilities maintenance operations, railcar manufacturing operations, and railcar maintenance operations

### Retail & Services:

This business segment forms part of what JR East refers to as its "lifestyle services" business and includes retail sales and restaurant operations, as well as a wholesale business, a truck transportation business, and advertising and publicity

#### Real Estate & Hotels:

This business segment forms part of what JR East refers to as its "lifestyle services" business and includes shopping center operations, leasing of office buildings and other properties, hotel operations and development and sales of the real estate relating to these operations

#### Others:

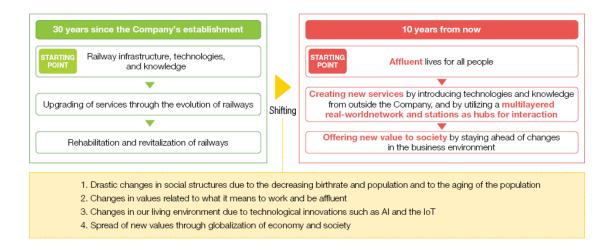
This business segment represents categories of business that are not included in the aforementioned three segments, and includes the IT & *Suica* business, which includes credit card operations, and the information processing operations.

#### 1.2 JR East Group Management Vision: "Move Up" 2027

JR East set out the Group's management vision "Move Up" 2027 in July 2018, to implement a renewed growth strategy by staying ahead of the changes in the business environment towards the fiscal year ending 31 March 2028. The Group intends to change its business model from providing services focused on railway infrastructure to creating people-focused values and services, and will aim to continue to create the values of "Trust" and "Affluence" in cities, regional areas, and around the world.

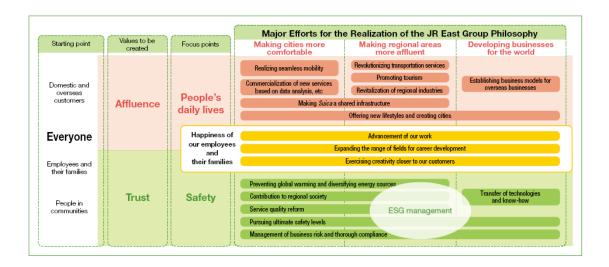
# 1.2-1 Basic Policies of "Move Up" 2027

JR East will shift its value creation strategy from providing services-based railway infrastructure to providing greater value to a society based on affluent lives for all people.



### 1.2-2 Overview of "Move Up" 2027

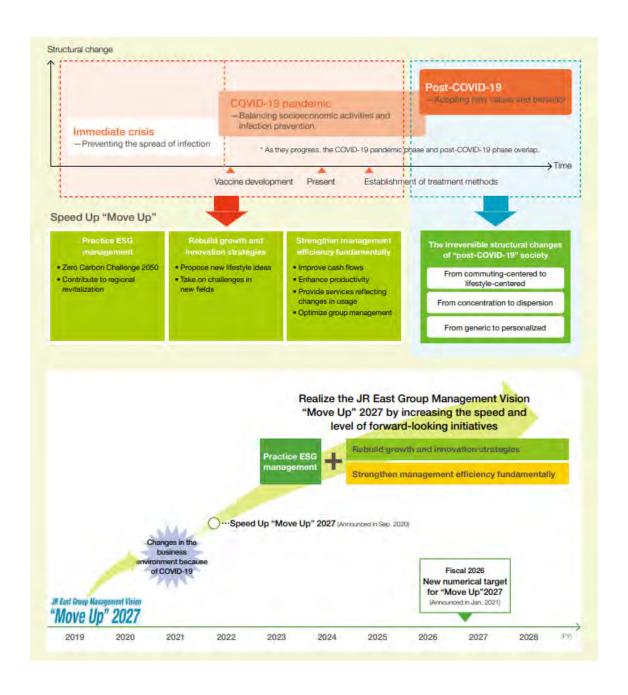
We will aim to continue to create the values of "Trust" and "Affluence" in cities, regional areas, and around the world by taking everyone (people) as our starting point and focusing on "Safety", "People's daily lives" and "Happiness of our employees and their families".



# 1.2-3 Speed Up "Move Up"

JR East announced management policies of Speed Up "Move Up" in September 2020 to address the post-COVID-19 structural changes in a society.

The Group will strive to speed up the reforms and investments into growth and innovation planned within the "Move Up" 2027 while fundamentally strengthening management efficiency. This will enable us to work further with local communities to become a more sustainable corporate group



#### 1.3 Towards achieving Sustainable Development Goals (SDGs)

We believe that as a member of society we have a responsibility to participate in "Environmental, Social and Governance" ("ESG") management, and to strive to resolve social issues through our business especially at a time when various social issues, including global environmental issues, decreasing birth rate and the aging of the population in Japan as well as increasing economical gap between cities and regional areas, became a more prominent part of our business approach.

Consequently, the Group will aim to implement ESG management efficiently to assist in solving related issues through our businesses with a view to contributing to the development of local communities as well as the achievement of the Sustainable Development Goals (SDGs).

In particular, the Group is committed to placing safety as its top priority. Premised on this commitment, while seeking to deepen the trust of stakeholders in all our businesses and continuing to meet our daily challenges by introducing new value to society, we, as a Group, focus on the affluence of everyone in their daily lives. Consequently the Group will aim to grow continuously and realize a sustainable society through these efforts.

In respect of the existing 17 SDGs, while seeking to create value under "Move Up" 2027, the Group will concentrate efforts on the realization of the following;

- Three top priority SDGs as we consider we can leverage our business strength toward these goals:
  - 8. Decent Work and Economic Growth;
  - 9. Industry, Innovation and Infrastructure;
  - 11. Sustainable Cities and Communities;
- Second priority:
  - 7. Affordable and Clean Energy;
  - 12. Responsible Consumption and Production;
  - 5. Gender Equality; and
  - 13. Climate Action.

# Contributing to the Achievement of the SDGs



#### Outcome

# Consolidated operating revenues: ¥1,978.9 billion (fiscal 2022)

#### Social value

#### Heightened trust

- · Pursuit of ultimate safety levels
- Service quality improvement
   Environment-friendly mobility

#### Enrichment of daily life

- Offering appealing lifestyles
   Creating cities

#### Realization of the happiness of our employees and their families

- . Realization of the Medium-Term Vision for Health and Productivity Management 2023
- Enhancement of employee job satisfaction



# Output

# Transportation services

Realization of safe, high-quality services sought by customers and contribution to the development of local communities.

# Life-style services

Offering appealing lifestyles through ekinaka (inside railway stations) businesses as well as shopping center and hotel businesses

### IT & Suica services

Establishment of digital networks centered on mobility as a service (MaaS), Suica, and data marketing

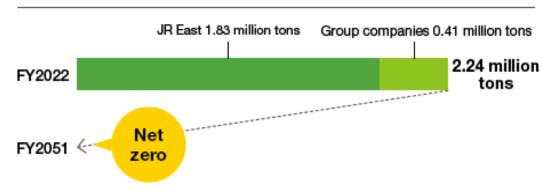
Ambitious initiatives to achieve Groupwide net-zero CO: emissions through such means as using railways to provide environment-triendly transportation services

Enhancement of the Group's overall human resources through concerted Groupwide support for the development of personnel

#### 1.4 ESG Management: Environment (E)

In May 2020, JR East formulated a long-term environmental objective of achieving net zero  $^1$  CO $_2$  emissions in railway operations by 2051 ("Zero Carbon Challenge 2050") as a pillar of its ESG management practice and in October 2020 formalised this objective as the target of the Group. By pursuing this target, JR East Group will strive to promote efforts to contribute to the realization of a "decarbonized society," while aiming to further improve of its environmental friendliness and realize a sustainable society.

# FY2051 CO₂ Emission Reduction Targets



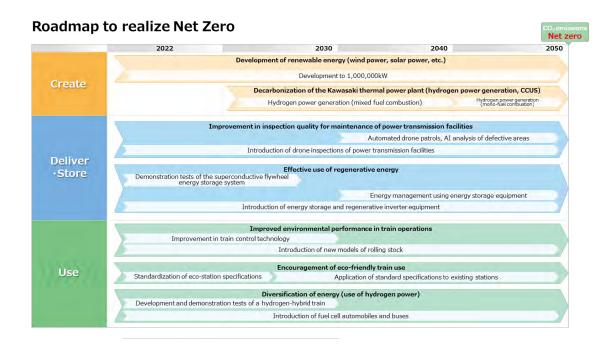
#### 1.4-1 Energy Vision 2027 - Connect

In practicing ESG management under Speed Up "Move Up" 2027, we recognize energy as an integral part of this vision because we believe the acceleration of global efforts toward decarbonization is inevitable and the global operational and geopolitical environments surrounding energy, including raising fuel prices, tight electricity supply and energy security issues have been changing drastically.

To respond to these changes, we aim to improve the "3E's (Environment, Economic Efficiency, and Energy Security) of the Group's energy network. This network is one of the Group's key strengths that integrates "Create", "Deliver • Store", and "Use".

In July 2022, we formulated "Energy Vision 2027 – Connect", which presents our energy strategy, which aims to realize a sustainable society and as a result to lead us to continuous growth.

<sup>1</sup> "net zero" refers to achieving effectively zero CO<sub>2</sub> emissions by matching the amount we emit with the amount we capture, reclaim, and use via leading-edge technologies



### 1.5 ESG Management: Social (S)

JR East Group's objective is to supply quality services to all customers, address and resolve local issues and achieve an affluent society.

Specifically, since its establishment, the Group has been focusing on realising railway services with passengers can feel safe and comfortable, and has expanded Shinkansen network as well as conventional lines in Kanto area network to make travel faster and more convenient for passengers, which helps to enhance the value of the area along railway lines.

The Group intends to expand its efforts further by introducing barrier-free facilities at stations and in railcars and providing information in multiple languages, to accommodate a diverse range of customers and realize an environment in which all customers feel comfortable.

The Group intends to work on regional development and focus on how to revitalize local areas. The Group intends to further expand its efforts in tourism and take on the challenges of new measures, including local digital transformation (DX) such as provision of mobility as a service ("MaaS"). These moves are part of our initiative to promote regional revitalization by working with people in local communities to provide optimal regional transportation.

The Group works to strengthen collaboration with communities, including through measures such as development of large-scale stations while modernising areas around the station through collaboration with local governments and residents to enhance the overall value of the area, and collaborating with municipalities, business operators and other relevant entities in relation to town development focused on stations in core regional cities.

Moving to the countryside has become one of the options for those who want to change their

workstyles with the expansion of DX and remote working. The Group intends to promote work vacations projects and attractive urban development to meet these needs.

As a new form of tourism, we will aim to create services that combine tourism and agriculture. This new service will support agriculture which is a major regional industry.

#### 1.6 ESG Management: Governance (G)

With regard to governance, the Group will aim to pursue the aforementioned initiatives in as sustainable manner as possible. In addition, the Group will seek to continue to reduce potential risks with a view to achieving ultimate safety levels. This is the Group's top priority in business management. The Group will also strengthen compliance structures, and build governance structures that ensure the "safety" of business management itself.

Since the establishment of JR East, we have worked relentlessly to heighten our levels of safety. Our earnest efforts to learn from unfortunate accidents in the past have enabled JR East to prevent future accidents with our continued developments in both tangible and intangible aspects.

Pursuit of safety measures can never end. The Group will continue to work tirelessly to improve safety by pursuing a goal of "zero accident involving passenger injuries or fatalities and zero accident involving employee fatalities (including all people involved with railway-related work, including JR East, Group companies, and partner companies)."

The JR East Sustainability Strategy Committee, chaired by the president and representative director, oversees and makes decisions mainly regarding the establishment and progress of climate change targets, and the management of risks and opportunities. The committee includes the vice presidents, and executive directors as well as full-time corporate auditors, and outside directors also attend its meetings. The committee is held twice a year, and the Zero Carbon Working Group and Hydrogen Working Group report and discuss the progress of CO<sub>2</sub> emissions reductions and hydrogen utilization.

#### 1.7 Significance of Sustainability Finance

JR East Group aims at continuous growth and address to solve the social issues to achieve development of local society as well as the international goal of SDGs through its business activities by executing Sustainability Finance.

# 2. Sustainability Finance Framework

The Framework covers three types of financing transactions ("Sustainability Finance") as follows:

Category	Description	
Green Finance	Finance to fund projects that meet the Green Eligibility Criteria (set out below)	
Social Finance	Finance to fund projects that meet the Social Eligibility Criteria (set out below)	
Sustainability Finance	Finance to fund projects that meet either the Green Eligibility Criteria or the Social Eligibility Criteria	

#### 2.1 Use of Proceeds

Proceeds from Sustainability Finance will be used to finance new or existing projects that meet the relevant eligibility criteria (set out above).

Where proceeds from Sustainability Finance are used to finance existing eligible projects, such eligible projects shall have commenced no less than 36 months prior to the launch of the relevant Sustainability Finance.

### 2.2 Criteria

# 2.2-1 Eligibility Criteria

#### [Green Eligibility Criteria]

GBP	Projects, Eligibi	lity Criteria	
Category			
Clean	Overall rail	Train	<ul> <li>Investments in relation to manufacturing or</li> </ul>
transportatio	transportation	cars	renovation of train cars powered by electricity
n	(Sections of		<ul> <li>Investments in relation to manufacturing or</li> </ul>
	trains, trains		renovation of hybrid train cars with CO <sub>2</sub> emissions
	powered by		below 50g-CO <sub>2</sub> /person-km or 25g-CO <sub>2</sub> /ton-km
	electric		<ul> <li>Research and development of next-generation train</li> </ul>
	battery or		cars such as hydrogen hybrid electric train cars
	hybrid train	Railway	· Investment (capital expenditure) and expenses
	cars)	facilities	(operating expenditure) for the maintenance,
			renovation or renewal of railway equipment, tracks,
			signals, station buildings, rail yards and other essential
			facilities for railway operations
Climate	Same as	Railway	Investment in disaster countermeasures for railway
Change	above	facilities	facilities (capital expenditure) to control damage and
Response	(Overall rail		maintain stable operations during disasters such as
	transportation		typhoons.
	)		

Renewable	Solar power	• Expenditure related to the construction, installation, operation or		
energy	generation,	maintenance of, or the financial investment in, solar or wind pow		
	wind	generation equipment.		
	power			
	generation			
Green	Projects that include buildings that meet Green Building Eligibility Criteria A or			
building	Green Building Eligibility Criteria B, each as set out below (excluding the			
	acquisition of l	and with remaining environmental problems including soil and water		
	pollution):			
	<green build<="" td=""><td>ling Eligibility Criteria A&gt;</td></green>	ling Eligibility Criteria A>		
	A building that has obtained or renewed any of the following building certifications			
	within 36 months prior to the launch of the relevant Sustainability Finance, or a			
	building which	is expected to obtain or renew the following building certifications		
	in the future			
	S or A ranked CASBEE (cf the Glossary bellow) construction (new, existing or			
	renewed) or CASBEE real estate (including CASBEE issued by local			
	municipalities)			
	• Platinum or Gold certified under LEED (cf the Glossary bellow) -BD+C			
	(Building Design and Construction) or LEED-O+M (Building Operations and			
	Maintenan	nance)		
		tar or Four star construction under BELS ( <i>cf</i> the Glossary bellow)		
		star or Four star construction under DBJ Green Building Certification ( <i>cf</i>		
		ssary bellow)		
		ling Eligibility Criteria B>		
	1	has a CO <sub>2</sub> reduction effect greater than the mandatory reduction rate		
		nissions set by government or local authorities in the most recent		
	1	either (a) achieves a top 15% CO <sub>2</sub> reduction performance in the		
	area where the	project is located or (b) achieves a 30% CO <sub>2</sub> reduction effect.		

# [Social Eligibility Criteria]

SBP	Projects, Eligibility Criteria		Target Population
Category			
Affordable basic	Train cars	<ul> <li>Available space for wheelchairs</li> </ul>	Persons with
infrastructure		passengers	disabilities
		Accessible restrooms for wheelchair	Senior
Socioeconomic		passengers	Pregnant
improvement	Railway	Install platform doors	Children and
and	facilities	Install barrier free bathroom	families with
empowerment		<ul> <li>Install elevators for platform access by</li> </ul>	children
		wheelchair passengers	All railway users
			including above

Pedestrian	Install safe and comfortable pedestrian	Local companies	
walkways	walkways including various types of	Residents	
network	open spaces, rest spaces and lush	All facility users	
	excursion spaces for pedestrians to	including above	
	socialize and relax		

#### 2.2-2 Exclusion Criteria

Proceeds from Sustainability Finance will not be used for projects related to the 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

#### 2.3 Process for Project Evaluation and Selection

Eligible projects, defined in 2.2, will be pre-selected by the Group's Finance and Investment Planning Department and the Director in charge of Finance and Investment Planning will make the final selection of eligible projects. In assessing the eligibility of the projects, the Group will analyze and examine financial, technical and operational, market and ESG risks. During the selection, development and operation of the project, the Group intends to assess the relationship of the project with the local area's environment.

#### 2.4 Management of Proceeds

The net proceeds, or an amount equal to the net proceeds of a Sustainability Finance will managed by the Group's Finance and Investment Planning Department, and allocated on a quarterly basis until the proceeds are fully allocated. The proceeds will held as cash or cash equivalents and the allocation is expected to be completed within approximately two years from issuance.

#### 2.5 Reporting

JR East will publish report annually on the allocation of Sustainability Finance proceeds to eligible projects (the "Allocation Report") and the environmental and social impact of the sustainability finance under this framework (the "Impact Report") on the Group's website. The first report will be published within a year of the financing.

#### 2.5-1 Reporting by issuer

#### Allocation Report

JR East will publish the Allocation Report until the proceeds are fully allocated to eligible projects.

The Allocation Report will disclose the amount allocated to each project, the total allocated amount and the total amount allocated to refinance existing projects.

Should a significant change occur following the allocation of proceeds, it will be disclosed in a timely manner.

# Impact Report

JR East will publish the Impact Report until the proceeds are fully allocated to eligible projects. The Impact Report will set out the following indicators for each eligible project or eligible category to the extent practicable.

# [Green Project]

Eligible Project	Impact indicators (example)
Overall railtransportation (Sections of trains, trains powered by electric battery or hybrid train cars)	CO2 emissions stemming from railway operations and other indicators depending on use of proceeds <train cars="">  Record of introducing train cars  Energy-saving by using VVVF inverter, etc.  Energy-saving by using LED lighting (vs. conventional fluorescent lighting)  Details of R&amp;D investment  Railway facilities&gt;  Details of maintenance, renovation and renewal of essential facilities to operate railways, including tracks, signals, station buildings and rail yards  Railway facilities&gt;  Details of investment in disaster countermeasure for the railway facility</train>
Solar power generation, wind power generation	<ul> <li>Overview of renewable energy project (Name of the project, location, output capacity, etc.)</li> <li>Power generation (kWh)</li> <li>Impact of CO<sub>2</sub> emissions reduction</li> </ul>
Green Building	<eligible a="" green="" project=""> <ul> <li>Overview of the building</li> <li>Type and rank of environmental certifications obtained</li> <li>Primary energy consumption</li> <li>CO<sub>2</sub> Emissions</li> <li>Eligible Green Project B&gt;</li> <li>Overview of the building</li> <li>CO<sub>2</sub> reduction rate</li> <li>Primary energy consumption</li> <li>CO<sub>2</sub> Emissions</li> </ul></eligible>

# [Social Project]

Eligible	Output (example)	Outcome	Impact
Project			
Train cars	Number of train cars introduced	<ul> <li>Ensure mobility</li> </ul>	Contribute to
	<ul> <li>Number of cars with space for</li> </ul>	opportunities for the	the realization
	wheelchairs	socially vulnerable	of a truly
	Number of cars with barrier-free	<ul> <li>Improve safety and</li> </ul>	symbiotic
	bathrooms	comfort for all railway	society by
Railway	Number of stations with platform	users	promoting
facilities	doors		barrier-free
	<ul> <li>Number of stations with barrier-</li> </ul>		access
	free bathrooms		
	<ul> <li>Number of stations with elevators</li> </ul>		
Pedestrian	Overview of pedestrian network	<ul> <li>Improve safety and</li> </ul>	Sustainable
walkways	facilities	comfort for local	and resilient
network		companies, residents and	national land
		users	(promoting
			sustainable
			community
			development)

#### 2.6 External Review

#### 2.6-1 Second Party Opinion (external review before financing)

JR East Group have assigned DNV Business Assurance Japan to provide an external review, in the form of a Second Party Opinion on the alignment of the Framework with the Green Bond Principles ("GBP") 2021 published by the International Capital Market Association ("ICMA"), the Social Bond Principles ("SBP") 2021 by ICMA, the Sustainability Bond Guidelines ("SBG") 2021 by ICMA, the Green Bond Guidelines 2022 published by the Ministry of the Environment of Japan, the Social Bond Guidelines 2021 published by Financial Services Agency, the Green Loan Principles ("GLP") 2021 and the Social Loan Principles ("SLP") 2021 published by the Loan Market Association ("LMA"), the Asia-Pacific Loan Market Association ("APLMA") and the Loan Syndications & Trading Association ("LSTA"), and the Green Loan Guidelines 2022 published by the Ministry of the Environment of Japan.

#### 2.6-2 Compliance Review

JR East Group will obtain a review from DNV Business Assurance Japan, an independent external agency, to assess the compliance of eligible project reporting with the Group's Sustainability Finance Framework within a year of each Sustainability Finance transaction. The review will be conducted annually until the proceeds are fully allocated.

#### Glossary:

The following terms used in this Framework have the meanings indicated below:

- CASBEE: The Comprehensive Assessment System for Built Environment Efficiency (CASBEE) Certification is a green building certification scheme in Japan, pursuant to which a third party certifies the environmental performance of buildings. The certification scheme includes certifications for different types of buildings, including: CASBEE for Buildings, CASBEE for Real Estate, and CASBEE for Housing.
- LEED: Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.
- BELS: The Building Housing Energy efficiency Labelling System (BELS) is an energy performance label, issued under guidelines established by Japan's Ministry of Land, Infrastructure, Transport, and Tourism. The BELS certification scheme evaluates primary energy consumption in order to measure energy performance.
- DBJ Green Building Certification: The Development Bank of Japan (DBJ) Green Building Certification Programme was launched by Development Bank of Japan in 2011 and is operated in conjunction with the Japan Real Estate Institute (JREI), a major appraisal firm in Japan. The certification scheme is recognized as one of Japan's major regional standards. The certification is available for office buildings, logistics, residential, and retail facilities.

#### Disclaimer

The information and opinions contained in this JR East Sustainability Finance Framework (the "Framework") are provided as at the date of the Framework and are subject to change without notice. None of JR East or any of its affiliates assume any responsibility or obligation to update or revise such statements, regardless of whether those statements are affected by the results of new information, future events or otherwise. The Framework represents current JR East policy and intent, is subject to change and is not intended to, nor can it be relied on, to create legal relations, rights or obligations. The Framework is intended to provide non-exhaustive, general information. The Framework may contain or incorporate by reference public information not separately reviewed, approved or endorsed by JR East and accordingly, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by JR East as to the fairness, accuracy, reasonableness or completeness of such information. The Framework may contain statements about future events and expectations that are forward looking statements. None of the future projections, expectations, estimates or prospects in this document should be taken as forecasts or promises nor should they be taken as implying any indication, assurance or quarantee that the assumptions on which such future projections, expectations, estimates or prospects have been prepared are correct or exhaustive or, in the case of assumptions, fully stated in the Framework. No representation is made as to the suitability of any financial products or instruments of JR East labelled as "Green", "Social" or "Sustainable" products or instruments to fulfil environmental, social or sustainability criteria required by prospective investors. Each potential investor should determine for itself the relevance of the information contained or referred to in the Framework or the relevant documentation for such products or instruments regarding the use of proceeds and its investment should be based upon such investigation as it deems necessary. JR East has set out its intended policy and actions in the Framework in respect of use of proceeds, project evaluation and selection, management of proceeds and reporting, in connection with products or instruments labelled as Green, Social or Sustainable. However, it will not be an event of default or breach of contractual obligations under the terms and conditions of any such products or instruments if JR East fails to adhere to the Framework, whether by failing to fund or complete Eligible Projects or by failing to ensure that proceeds do not contribute directly or indirectly to the financing of the excluded activities as specified in the Framework, or by failing (due to a lack of reliable information and/or data or otherwise) to provide investors with reports on uses of proceeds and environmental impacts as anticipated by the Framework, or otherwise. In addition, it should be noted that all of the expected benefits of the Eliqible Projects as described in the Framework may not be achieved. Factors including (but not limited to) market, political and economic conditions, changes in government policy (whether with a continuity of the government or on a change in the composition of the government), changes in laws, rules or regulations, the lack of available Eligible Projects being initiated, failure to complete or implement projects and other challenges, could limit the ability to achieve some or all of the expected benefits of these initiatives, including the funding and completion of Eligible Projects. Each environmentally focused potential investor should be aware that Eligible Project may not deliver the environmental or sustainability benefits anticipated, and may result in adverse impacts.