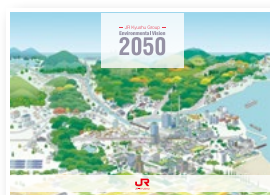


JR Kyushu Group

Information Disclosure Aligned with TNFD Recommendations

Background and Objective of TNFD Disclosure

The JR Kyushu Group is supported by Kyushu's abundant nature, and the conservation and utilization of that nature is at the core of our management as we expand into a variety of businesses alongside our railway. The Group has designated environmental measures as an important management issue, and has published the JR Kyushu Group Environmental Vision 2050 (hereinafter "Environmental Vision"). Under our Environmental Vision, we are carrying out initiatives together with local communities, customers, and business partners with the realization of a nature-friendly society as a key focus. With the degradation of natural capital and loss of biodiversity becoming a focus as new business risks in addition to climate change, the Group has made disclosures of information according to the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), in line with moves being made throughout society.



In this disclosure, we used the TNFD's LEAP approach to map our railway business's dependency and impacts on natural capital and analyze risks and opportunities. Going forward, we will establish specific measures, expand the scope of our analysis to include our other businesses, and conduct our business in harmony with the environment.

CONTENTS

Introduction	1
General Requirements	2
Governance	3
Strategies	
About the LEAP Approach	5
Scoping	6
Locate	7
Evaluate	8
Assess	9
Prepare	13
Risk Management	15
Metrics and Targets	16
Conclusion	17

General Requirements

The Six General Requirements

1

Applicability of Materiality

"Business development in harmony with the environment" has been designated as materiality, and is one of the points that the JR Kyushu Group focuses on at all times. In our various analyses related to natural capital according to TNFD recommendations, we evaluate the Group's dependency on natural capital and the impact of our business activities on natural capital according to the double materiality approach.

2

Scope of Disclosure

Our analysis for the purposes of this disclosure covered our Transportation Group, and the scope of our disclosure primarily covers our railway business, including all value chains. Our dependency and impact on natural capital, and related risks and opportunities, have been evaluated based on this.

3

Areas with Nature-Related Issues

Upon identifying geographical points of contact with nature for each of the businesses in our railway business's value chains, the following three rolling stock depots were selected for analysis due to having factory functions that are thought to have a particularly large impact.

- 1 Kokura Rolling Stock Center (Kitakyushu City, Fukuoka Prefecture)
- 2 Kumamoto General Rolling Stock Yard (Kumamoto City, Kumamoto Prefecture)
- 3 Kumamoto General Rolling Stock Yard Omura Rolling Stock Management Office (Omura City, Nagasaki Prefecture)

4

Integration with Other Sustainability-Related Disclosures

Information related to climate change is disclosed in line with TCFD recommendations. This disclosure was compiled by the internal department of the Company that is responsible for TCFD disclosures. The ways in which our TCFD and TNFD affect each other were discussed by parties such as the ESG Strategy Committee, Executive Committee, and Board of Directors and applied to the respective disclosure documents. Going forward, we will consider an integrated TCFD and TNFD disclosure.

5

Periods for Consideration

Like our information disclosure aligned with TCFD recommendations, this disclosure assumes the following periods.

Short term: Within 3 years

Medium term: Over 3 years later but within 10 years

Long term: Over 10 years later

6

Engagement with Indigenous People, Local Communities, and Affected Stakeholders

In addition to performing human rights due diligence efforts according to the JR Kyushu Group Basic Policy on Human Rights, we promote highly transparent and trustworthy procurement activities throughout our supply chain according to our Basic Procurement Policy. Through these efforts, we are strengthening our response to human rights issues and emphasizing dialogue with local communities as we carry out business activities and ecological conservation activities.

Governance

Natural Capital and Human Rights Governance Framework

The Group has designated "Business development in harmony with the environment" as materiality, and has positioned responses to natural capital-related issues such as climate change adaptation, promotion of resource recycling and conservation of biodiversity as key management issues for building a sustainable society. Under this policy, operations are carried out by our ESG Strategy Committee, chaired by the President and CEO. The Committee confirms that all of our environmental measures (related to climate change, resource recycling, biodiversity, etc.) are being implemented according to our Environmental Vision, sets voluntary targets, checks progress, and carries out risk management. Important matters are reported to the Board of Directors, who give instructions when necessary. Our disclosure of our Environmental Vision in February 2025 was also approved by the Board of Directors through this process. Going forward, we will continue to discuss our environmental measures and disclosure policies, the setting of targets, and our management framework and strengthen our ESG management to realize a decarbonized society, a circular society, and a nature-friendly society.

We are conscious that issues related to human rights, labor, and ethics are also important management issues and have taken measures such as establishing the JR Kyushu Group Human Rights and Corporate Ethics Committee (hereinafter "Human Rights and Corporate Ethics Committee") chaired by the President and CEO, disseminating the JR Kyushu Group Basic Policy on Human Rights, established based on international human rights standards, conducting human rights due diligence efforts, carrying out highly transparent and trustworthy procurement activities throughout our entire supply chain, operating a whistleblowing system for human rights issues, and managing and supervising our internal

whistleblowing system. Important matters are reported to the Board of Directors, who give instructions when necessary.

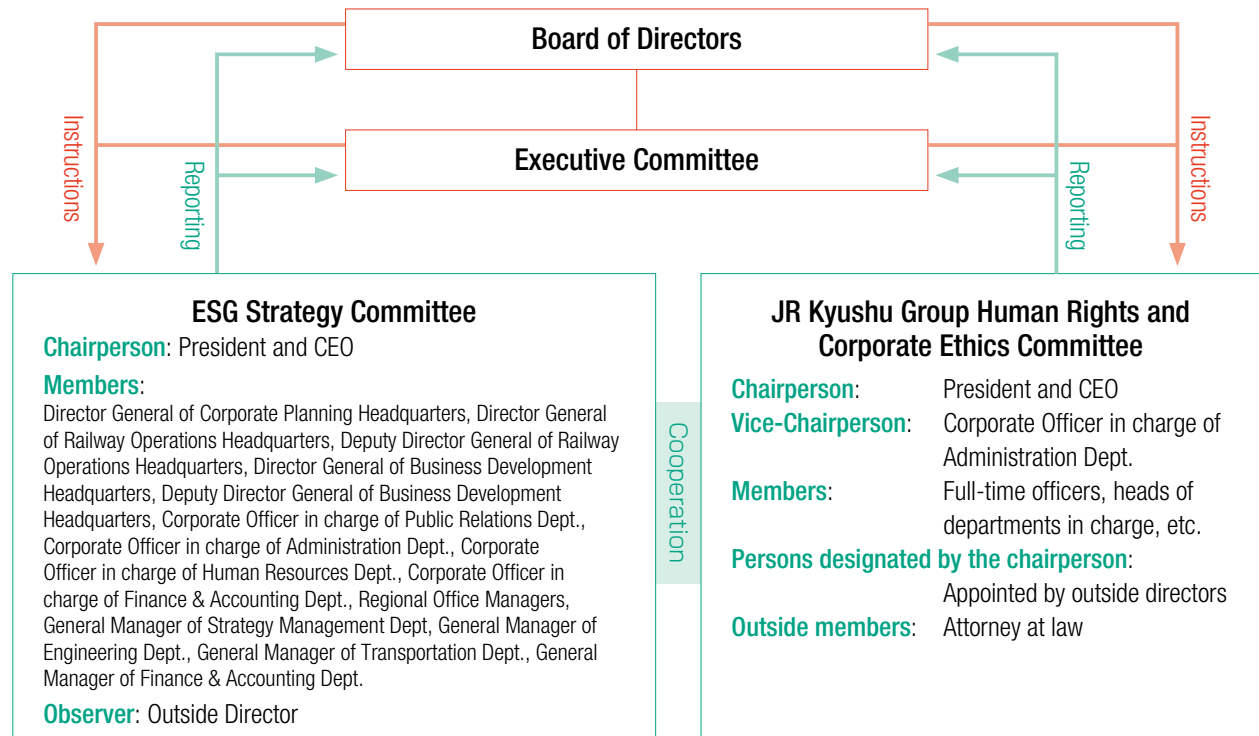
We also carry out integrated management of natural capital and human rights issues through collaboration between the ESG Strategy Committee and the Human Rights and Corporate Ethics Committee. Dialogue and engagement with local communities and stakeholders is emphasized and a framework has been established for cross-sectional

management of natural capital, human rights, and ethics.

The JR Kyushu Group Basic Policy on Human Rights and various initiatives to uphold human rights are explained on the Group's website. Refer to the link below for details.

https://www.jrkyushu.co.jp/company/ir_eng/esg/human_rights_en/

● ESG management and the JR Kyushu Group's human rights promotion system



ESG Strategy Committee

● Number of meetings held (FY2025/3)

14th time (June 24, 2024)	Report on the status of environment-related measures <ol style="list-style-type: none"> ① Energy management ② Environmental pollutant management ③ Resource circulaion ④ Promotion of decarbonization ⑤ Formulation of JR Kyushu Group Environmental Vision and Roadmap ⑥ Toward the realization of a decarbonized society
15th time (November 25, 2024)	<ol style="list-style-type: none"> ① Direction of JR Kyushu Group Integrated Report 2025 <ul style="list-style-type: none"> • Investor feedback • Progress on non-financial KPIs ② Environmental Vision and Roadmap ③ Plan for reduction of GHG emissions by 2035 ④ Status of ESG Finance
16th time (March 10, 2025)	<ol style="list-style-type: none"> ① Editorial Policy of the JR Kyushu Group Integrated Report 2025 <ul style="list-style-type: none"> • Evaluation of Integrated Report 2024 • Connection between non-financial and financial elements ② Disclosure of information aligned with TNFD recommendations ③ Trends and responses for sustainability disclosure standards

● Reporting to the Board of Directors

April 2024	<ul style="list-style-type: none"> • Expansion of target businesses for information disclosure based on TCFD recommendations • Production policy for the JR Kyushu Group Integrated Report 2024 • Progress of ESG internal penetration
August 2024	Disclosure of the JR Kyushu Group Integrated Report 2024
February 2025	<ul style="list-style-type: none"> • JR Kyushu Group Environmental Vision • Establishment of JR Kyushu Group Environmental Vision

JR Kyushu Group Human Rights and Corporate Ethics Committee

● Number of meetings held (2024)

2nd time (August 26, 2024)	Agenda Establishment of JR Kyushu Group Basic Policy on Customer Harassment
3rd time (November 25, 2024)	Agenda Review of JR Kyushu Group Corporate Ethics Hotline
4th time (January 27, 2025)	Matters reported <ol style="list-style-type: none"> ① Status of initiatives related to human rights and corporate ethics in FY2025/3 ② Status of JR Kyushu Group Corporate Ethics Hotline in FY2025/3 Agenda <ol style="list-style-type: none"> ① Initiatives related to human rights and corporate ethics in FY2026/3 ② Amendment of Regulations for Operation of Corporate Ethics Consultation Desk

● Reporting to the Board of Directors

September 2024	Establishment of JR Kyushu Group Basic Policy on Customer Harassment
February 2025	Initiatives related to human rights and corporate ethics in FY2026/3

Strategies

About the LEAP Approach

The LEAP approach is an important element of TNFD recommendations as a method for evaluating and managing issues related to natural capital. The Group mapped dependency and impacts on natural capital in railway business's value chains and analyzed risks and opportunities according to this approach. The following table first indicates the recommended framework and then outlines the results of the Company's analysis.

	TNFD recommendations	Overview for the Group
<div style="background-color: #4CAF50; color: white; padding: 10px; text-align: center; font-weight: bold; font-size: 2em;">1</div> <p>Scoping</p>	<p>Select key areas Decide on target businesses and the scope of the supply chain for analysis</p>	<ul style="list-style-type: none"> Analyzed our main business segments using ENCORE, a tool for analysis of nature-related risks Comprehensively evaluated degree of dependency, degree of impact, and business scale Designated Transportation Group as a target business for analysis based on analysis results
<div style="background-color: #4CAF50; color: white; padding: 10px; text-align: center; font-weight: bold; font-size: 2em;">2</div> <p>Locate</p>	<p>Confirm the relationship between the businesses and nature Ascertain the connections with nature, identify priority regions, and identify sectors and value chains</p>	<ul style="list-style-type: none"> Identified risks and opportunities in the value chains of our railway business and identified geographical connections to natural capital Utilized IBAT and Aqueduct to analyze geographical characteristics at rolling stock depots with factory functions that are thought to have a particularly large impact on natural capital While no significant risks have been found in our analysis at this time, we will continue to consider the environment in our business activities based on their connections to nature
<div style="background-color: #4CAF50; color: white; padding: 10px; text-align: center; font-weight: bold; font-size: 2em;">3</div> <p>Evaluate</p>	<p>Analyze dependency and impact Identify dependency relationships and impact, analyze the degree of dependency, and analyze the degree of impact</p>	<ul style="list-style-type: none"> Analyzed dependency and impact on natural capital by each of our railway business's value chains Dependency: Dependency on disaster prevention through systems adjusting the flow of water through forests and wetlands, and on cultural services by sightseeing trains Impact: Damage to natural capital through railway material and equipment procurement activities and impact on water quality and land from waste water and pollutants from rolling stock depots
<div style="background-color: #4CAF50; color: white; padding: 10px; text-align: center; font-weight: bold; font-size: 2em;">4</div> <p>Assess</p>	<p>Identify risks and opportunities Identify risks and opportunities, evaluate the importance of risks and opportunities, and mitigate and manage risks</p>	<ul style="list-style-type: none"> Set two future scenarios: "coexistence with nature" and "worsening of natural environment" Identified and evaluated risks and opportunities for each scenario "Coexistence with nature" scenario: Transition risks from tightening of environmental regulations and business opportunities from mitigation of risks of natural disasters are anticipated "Worsening of natural environment" scenario: Increases in disaster risks due to increasing severity of natural disasters and loss of customer demand due to a decrease in tourism resource value are anticipated
<div style="background-color: #4CAF50; color: white; padding: 10px; text-align: center; font-weight: bold; font-size: 2em;">5</div> <p>Prepare</p>	<p>Consider response measures Consider response measures and set targets, allocate strategies and resources, report and publicize this information</p>	<ul style="list-style-type: none"> Organized response measures for each value chain to address the key risks and opportunities identified in the "Assess" phase Implemented responses for business continuity and conservation of nature in areas around our railway lines Specific measures: disaster measures (planning for river basins), introduction of green areas and permeable pavement, appropriate management of waste We also established Green Procurement Guidelines and are making new use of community resources through sightseeing trains

1 Scoping: Select key areas

We utilized ENCORE*1, a TNFD-recommended tool for analysis of nature-related risks, to relatively compare the dependency on ecological services (hereinafter "dependency") and impacts on natural capital (hereinafter "impacts") by the value chains of each of the Group's business segments (Transportation Group, Real Estate and Hotels Group, Retail and Restaurant Group, Construction Group, Business Services Group).

Scores were assigned indicating the degree of dependency and impact by each business segment and were comprehensively compared, taking into account the scale of each business (based on operating revenue). The results indicated that the Transportation Group had the highest relative score for both dependency and impact.

Based on these results, the Transportation Group was designated as the target business for the first analysis and a detailed analysis was conducted according to the LEAP approach.

*1 A tool for visualizing how an economy is dependent on nature, how it could impact nature, and how changes in the environment could pose risks to the business

Business group	Dependency			Impact		
	Total score	Ratio of operating revenue*2	Relative score	Total score	Ratio of operating revenue	Relative score
Transportation	339	36%	123	490	36%	177
Real Estate and Hotels	318	31%	97	474	31%	145
Retail and Restaurant	590	15%	87	320	15%	47
Construction	321	10%	30	523	10%	50
Business Services	269	9%	25	441	9%	41

*2 For fiscal 2025/3

2 Locate: Confirm the Relationship Between the Businesses and Nature

In our analysis according to the LEAP approach for our railway business, the main business of our Transportation Group, the JR Kyushu Group's railway value chains were organized at three levels: broad categories, medium categories, and fine categories. Broad categories are used to ascertain the frameworks of entire businesses, medium categories are used to break them down into processes, and fine categories are used to break these down further into specific activities, enabling systematic, comprehensive organization.

This structure enables us to identify areas with a high dependency or impact on natural capital and comprehensively ascertain risks and opportunities, as well as enabling important points to be prioritized in disclosures and measures and natural capital risks to be managed without overlooking any points.

We identified nature-related risks and opportunities in these value chains and identified geographical connections to nature. Details on the risks, opportunities, and geographical connections that were identified are explained in "Assess" on P9.

Broad categories (broad scope of businesses)	Medium categories (processes)	Fine categories (specific transactions and activities)
Railway facilities (Track & Facilities, Electrical Engineering, stations)	Construction	Planning and construction of tracks (infrastructure development)
		Procurement of railway materials and facilities
		Developments near stations (station building development)
	Railway operations	Procurement of electricity and energy
		Developments near stations (operation of station buildings)
	Maintenance	Maintenance of tracks and facilities
Rolling stock	Manufacturing	Manufacturing of rolling stock (new building and upgrades)
	Railway operations	Railway operations
	Maintenance	Rolling stock depots (maintenance and waste)

In addition to our analysis of all value chains, our analysis for our rolling stock depots, which have factory functions that are thought to have a particularly large impact on natural capital included region-specific analysis of (1) Kokura Rolling Stock Center, (2) Kumamoto General Rolling Stock Yard, and (3) Kumamoto General Rolling Stock Yard Omura Rolling Stock Management Office using IBAT*1 and Aqueduct*2.

The results of the analysis indicated that no major risks related to the number of endangered species, the status of protected areas, and water stress and depletion around the three sites can be found among the geographical characteristics recognized by the tools at this time, and direct restrictions of the sites' business activities are also judged to be limited.

On the other hand, there are clear connections to nature, and it remains important to consider the environment in the business activities that have been the focus. Specific measures for rolling stock depots are explained in "Prepare" on P13.

*1 A tool that provides geospatial data and enables access to the IUCN (International Union for Conservation of Nature and Natural Resources) Red List and databases on protected areas and key biodiversity areas (KBAs)

*2 A tool for evaluating water risks for each region of the world from the perspectives of physical (quantitative and qualitative), regulatory, and reputation risks

Site	Main environment of the area	No. of endangered species (CR/EN/VU*3)	Status of protected areas nearby	Water stress	Water depletion	Evaluation
Kokura	Urban: urban area, few green areas	173 (12/85/76)	Multiple known areas (many are IUCN Category IV*4)	Low-medium	Low	Many protected areas but little material impact/consideration will remain necessary in future
Kumamoto	Suburban: mix of agricultural, residential, and forest areas	190 (12/99/79)	Limited/scope of impact on nearby waterways (rice fields, water supplies, rivers, etc.)	Low-medium	Low	Many points of contact/consideration for agricultural and rice field ecosystems is needed
Omura	Coastal: near wetland and coast	190 (14/99/77)	Protected areas scattered around coastal buffer zone and premises	Low-medium	Low	Notable connection to Omura Bay environment/consideration for water quality, including wastewater, is needed

*3 Categories of the IUCN Red List that are considered endangered species.
CR: Critically Endangered, EN: Endangered, VU: Vulnerable.

*4 Corresponds to "Species and Habitat Management Areas" under the IUCN protected area categories (I–VI).

3 Evaluate: Analyze Dependency and Impact

Based on the risks and opportunities that were identified, we conducted an analysis of dependency on ecological services and impact on natural capital throughout our railway business's value chains. Our railway business has a wide range of connections to natural environments in local communities. In particular, the planning and construction of tracks and our railway operations are dependent on systems adjusting the flow of water through forests and wetlands, which ensure the stability of the topography and soil. Additionally, our sightseeing trains are dependent on cultural services such as views from the train window and beautiful natural environments.

Meanwhile, impact on natural capital was found to be comparatively high due to damage to forest ecosystems from procurement of railway materials and facilities, land erosion, water pollution, and waste water and impact on water quality and land from waste water and pollutants from rolling stock depots.

The degree of dependency and impact is evaluated according to the following standards.

Large: Serious long-term dependency or impact, **Medium:** Serious temporary dependency or impact, **Small:** Minor dependency or impact

Broad categories	Medium categories	Fine categories	Dependency on ecological services		Impact on natural capital		
			Dependency	Details	Impact	Details	
Track & Facilities: Railway facilities (Electrical Engineering, stations)	Construction	Planning and construction of tracks	L	Dependent on on systems adjusting the flow of water through forests and wetlands to ensure the stability of the topography and soil	M	Change of land cover and loss of wildlife habitats due to land modification for construction	
		Procurement of railway materials and facilities	M	Materials are primarily dependent on mineral resources and forest resources	L	Direct burden on natural environment if waste is found to have been improperly treated	
	Railway operations	Procurement of electricity and energy	M	In particular, wood procurement itself is directly dependent on ecological services (supply services)	L	Deforestation and topographical modification for quarry development	
		Developments near stations (operation of station buildings)	M	Renewable energy sites are dependent on ecological functions (soil retention, etc.) provided by natural capital such as forests, farmland, and coastal areas	L	Land erosion and water pollution from development of mining areas	
	Maintenance	Maintenance of tracks and facilities	M	Parks, rivers, unpaved areas, etc. near station buildings function as natural urban water drainage systems	M	Deforestation, fragmentation of wildlife habitats, and landscape destruction from improperly designed renewable energy facilities	
			L	Renewable energy sites are dependent on ecological functions (soil retention, etc.) provided by natural capital such as forests, farmland, and coastal areas	L	GHG emissions from power generation	
	Maintenance	Maintenance of tracks and facilities	M	Permeation of soil by polluted water, impact on groundwater systems, and incursion of waste water into surrounding ecosystems if flooding occurs due to insufficient drainage	M	Environmental burden such as GHG emissions during burning of waste, release of polluted water into soil of reclaimed land, and release of plastic into sea	
			M	Dependent on natural adjustment services such as systems adjusting the flow of water through forests and wetlands to ensure the stability of tunnel structures and soil	M	Impact on natural topography and underground water veins from tunnel repairs and large-scale civil engineering projects, digging, and drain construction involving redigging	
	Rolling stock	Manu- facturing	Rolling stock manufacturing (new building and upgrades)	M	Slopes, areas around railway lines, and areas around facilities for railway are dependent on natural adjustment services such as vegetation maintenance and systems adjusting the flow of water through forests and wetlands	M	Burden on biodiversity and waters from accumulation of chronic localized impacts on biodiversity through long-term, widespread usage
			Railway operations	L	Procurement and manufacturing of rolling stock materials are dependent on natural capital (minerals and water resources)	M	Impacts on soil, groundwater, rivers, and wildlife in the event of leakage or scattering of paint, etc. containing PCB or harmful heavy metals
M		Railway infrastructure is dependent on natural adjustment services, including soil maintenance, easing of currents, and mitigation of natural disasters by forests and wetlands.		M	Impacts on soil, air, and water resources in the manufacturing, use, and disposal stages from chemical substances used in the paint, insulation, etc. of rolling stock		
M		Reliable operation is dependent on the soundness of the natural environment in areas around railway lines (habitat and steady supply of food for animals)		M	Pollution of soil and water from waste materials if metals, plastics, etc. are sent to landfills or burned instead of being recycled		
Maintenance		Rolling stock depots	L	Our sightseeing trains are dependent on cultural services such as views from the train window and beautiful natural environments	L	Negative impact on biodiversity and ecosystem functions in areas around railway lines due to death of wildlife in collisions, stress, and impedance of migration routes	
			M	Cleaning of rolling stock is dependent on natural capital (water resources)	L	Outflow of surface soil, destruction of vegetation, or influx of gravel downstream if a slope collapses or land subsidence occurs through railway operations	
				M	Deposition in air, soil, or water or interference with ecosystems by exhaust or noise from diesel vehicles		
				L	Impact on above-ground or underground waterways, soil, or wildlife from release of oil, etc. or chemical substances from cleaning or painting materials		
				L	Chronic burden on rivers or groundwater due to drainage of oils, synthetic detergents, etc. from cleaning and maintenance of rolling stock		
				L	Impact from permeation of the ground by pollutants through long-term maintenance, cleaning, painting, oiling, etc.		

4 Assess: Identify Risks and Opportunities

The Group conducted qualitative analysis of two future scenarios—"coexistence with nature" and "worsening of natural environment"—to evaluate risks and opportunities that could impact our future business activities according to TNFD recommendations.

"Coexistence with nature" scenario

With the national government and local governments carrying out nature restoration and protection measures and tightening regulations by 2030 and companies also being called upon to consider natural capital, we anticipate that the whole of society will shift toward coexistence with nature. We envision a future in which the soundness of ecosystems in areas around railway lines will have greatly improved by 2050. As conservation and restoration of forests and wetlands progress, the risk of natural disasters will decrease and railway operations will stabilize. Additionally, as our consideration for natural capital earns us greater regard from stakeholders and broadens demand for sustainable tourism, a positive cycle between growth of corporate value and growth of regional value can be expected.

"Worsening of natural environment" scenario

In the event that sufficient measures for natural capital are not taken, we anticipate a future in which ecosystems continue to deteriorate from 2030 onward. As forests are devastated and wetlands shrink, natural disasters are likely to become more frequent and severe and communities around our railway lines will become more vulnerable. As a result, impacts such as a decrease in passenger numbers may occur from the damage to asset value and decrease in the area's value as a tourism resource due to the cumulative infrastructure damage. Financial risks such as a decrease in stakeholders' regard for us and increase in capital procurement costs could also occur, and the deterioration of natural capital is likely to pose a serious issue that threatens the sustainability of entire local communities.

Risks and opportunities are evaluated using the following degrees of impact and time frames.

Degree of impact	
Large	Severe impact in the long term or likely financial impact of 500 million yen or more
Medium	Severe impact temporarily or likely financial impact of 100 million yen or more
Low	Minor impact or likely financial impact of less than 100 million yen

Time frames	
Short term	3 years or less
Medium term	3-10 years
Long-term	More than 10 years

Risks

Value chain		Risk category	Risk	Nature of risks	Target area	Time frames	Degree of impact		
Broad categories	Medium categories							Fine categories	
Railway facilities (Track & Facilities, Electrical Engineering, stations)	Construction	Planning and construction of tracks	Physical	Acute	Increased risk of flood damage due to topographical modification	More frequent flood damage to infrastructure due to decline in natural adjustment functions, causing suspensions of services and increased restoration costs	(Not confined to particular areas) Broadly throughout Kyushu	Medium to long term	Large
		Procurement of railway materials and facilities	Physical	Chronic	Destruction of ecosystems of ballast quarries	Loss of habitat of rare species and environmental degradation resulting in criticism, restriction of operations, and increased material procurement costs	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Medium
			Transition	Technology	Insufficient measures for a circular economy	Increased difficulty in complying with laws and regulations, resulting in increased waste disposal costs and restrictions on procurement	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Medium
				Reputation	Criticism of mine development leading to decline of forests	Questioning of the Company's responsibility, leading to damage to brand and changes of suppliers	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Medium
					Criticism for unsustainable use of wood	Criticism resulting in damage to brand, changes of procurement policies, and loss of opportunities for collaboration with local governments	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Medium
	Railway operations	Procurement of electricity and energy	Transition	Reputation	Destruction of landscapes around renewable energy generation sites and opposition from residents	Changes and cancellations of projects and negative impact on brand image and co-creation with communities	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Low
		Developments near stations (operation of station buildings)	Physical	Chronic	Increase in waste from restaurant tenants	Increase in processing costs and environmental burden leading to criticism, etc. as well as negative impact on collaboration with local governments	Major station buildings	Short to medium term	Medium
	Maintenance	Maintenance of tracks and facilities	Physical	Chronic	Flooding and caving in of aging tunnels	Suspensions of services, costs of emergency inspections and repairs, as well as users feeling less safe	(Not confined to particular areas) Broadly throughout Kyushu	Medium to long term	Large
					Land subsidence and collapse	Suspensions of service and increased restoration costs as well as decrease in trust from users and instructions for improvement from administrative bodies	(Not confined to particular areas) Broadly throughout Kyushu	Medium to long term	Large
		Transition	Policy	Environmental impact by weedkillers	Impact on plant diversity and aquatic life and concerns of groundwater pollution leading to restrictions on use and instructions for improvement by administrative bodies. Response to residents, revision of management of areas around railway lines, increases in maintenance costs	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Medium	
			Market	Insufficient capital to invest in disaster prevention	Suspensions of service, destruction of facilities, and delayed restoration, leading to financial loss, decrease in trust from users, and instructions for improvement from administrative bodies	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Large	
			Liability for compensation	Issues with harmful substances (PCB, etc.) from insulation, etc.	Penalties, instructions from administrative bodies, criticism, increases in processing costs and repair costs	Buildings as a whole, including station offices, maintenance facilities, etc.	Short to medium term	Medium	

Strategies

Value chain			Risk category	Risk	Nature of risks	Target area	Time frames	Degree of impact	
Broad categories	Medium categories	Fine categories							
Rolling stock	Manufacturing	Rolling stock manufacturing (new building and upgrades)	Transition	Technology	Insufficient recycling measures	Increase in waste disposal costs, instructions from administrative bodies, doubts regarding sustainability, and increases in procurement costs	Rolling stock depots (factories)	Medium term	Large
				Liability for compensation	Environmental and human rights risks at supplier sites	Social criticism and negative reputation among investors, requests to cease trading, and changes of suppliers resulting in cost increases and supply instability	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large
	Railway operations	Railway operations	Physical	Chronic	Slope collapses and land subsidence due to changes in environment around the tracks	Increases in restoration costs and operating costs, decrease in reliability, and malfunctioning of transport infrastructure	(Not confined to particular areas) Broadly throughout Kyushu	Medium to long term	Large
					Transition	Policy	Tightening of exhaust regulations and environmental standards	Operational restrictions and penalties impacting reputation in society and decisions about procurement, and limitations on sustainable business operation	Rolling stock depots
			Systemic	Reputation		Distrust from residents of community about exhaust and noise	Increase in complaints and instructions from administrative bodies, stagnation of community cooperation, and poorer corporate image	(Not confined to particular areas) Broadly throughout Kyushu	Medium term
				Financial stability	Increases in capital procurement costs due to combined risks of large-scale natural disasters and destruction of ecosystems	Increases in capital procurement costs due to poorer reputation among ESG investors and financial institutions	—	Medium term	Large
	Maintenance	Rolling stock depots	Transition	Market	Delays in upgrades of aging infrastructure due to increased financial burden	Increases in costs to address facility faults and natural disasters, longer restoration periods, suspensions of services, etc., along with impact on reputation for resilience	Rolling stock depots (factories) *To be relocated to Higashi-Kokura	Medium term	Large
				Reputation	Water pollution from oil, detergents, etc. in waste water	Instructions from administrative bodies and penalties, increase in processing costs, decrease in trust from residents, etc., along with impact on reputation for sustainability and ability to gain sustainability certification	Rolling stock depots	Short to medium term	Medium
					Potential risks of soil and groundwater pollution	Decontamination costs, restrictions on land usage, devaluation of assets, criticism and decrease in trust from residents and administrative bodies	Rolling stock depots	Medium term	Medium
				Liability for compensation	Issues regarding treatment of asbestos and PCB in aging facilities	Penalties and instructions from administrative bodies, impact on health, damage to reputation, etc., along with impacts on facility upgrades and redevelopment plans	Rolling stock depots	Short to medium term	Large

Opportunities

Value chain			Opportunity category	Opportunity	Nature of opportunities	Target area	Time frames	Degree of impact	
Broad categories	Medium categories	Fine categories							
Railway facilities (Track & Facilities, Electrical Engineering, stations)	Construction	Planning and construction of tracks	Company's performance	Market	Cooperation with natural tourism resources	Increased use of railway and regional development by securing new customer segments	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large
				Products and services	Development of environmentally friendly civil engineering technology	Improvement of reputation among local governments, residents, and investors and increase in orders due to harmony with landscapes and communities	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Medium
		Sustainability	Protection, restoration, and regeneration of ecosystems	Creation of comfortable spaces through greening of roofs and walls	Improvement of hot environments, more appealing landscapes, and conservation of energy, leading to greater visitor satisfaction, greater reputation for ESG, attraction of tenants, and plans to enhance community cooperation	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large	
	Railway operations	Procurement of electricity and energy	Company's performance	Reputation capital	Joint business with local governments and partner companies	Stabilization of energy procurement, cost reduction, and closer community ties resulting in contribution to decarbonization and development of regional economies	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Large
		Developments near stations (operation of station buildings)	Company's performance	Market	Events in cooperation with commercial facilities and nature tourism	Promotion of regional tourism, attraction of customers, and creation of synergies with sightseeing trains, along with fostering a corporate image of harmony with nature	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Medium
	Maintenance	Maintenance of tracks and facilities	Company's performance	Market	Balancing of measures against landslides and natural disasters with tourism resources (greening of slopes, etc.)	Utilization of natural capital in disaster prevention infrastructure, ensuring safety, creating more attractive landscapes, and improving the value of train-based tourism	(Not confined to particular areas) Broadly throughout Kyushu	Medium to long term	Large
				Resource efficiency	Development of technologies to extend the life of facilities	Less frequent need to procure materials and carry out work, alleviating resource and worker shortages and impact on natural capital as well as balancing reduction of life cycle costs with environmental response	(Not confined to particular areas) Broadly throughout Kyushu	Medium term	Large
				Reputation capital	Joint conservation activities with residents of communities	Cooperation with communities in nature restoration activities and removal of invasive species, contributing to conservation and restoration of natural capital and strengthening community co-creation and our brand	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large
	Rolling stock	Manu-facturing	Rolling stock manufacturing (new building and upgrades)	Company's performance	Resource efficiency	Optimization of costs by extending life cycles of rolling stock	Lengthening of operational life of rolling stock and reduction of burden on natural capital, enabling balance between long-term optimization of investments and improvement of reputation for ESG through resource recycling strategies	Rolling stock depots (factories)	Medium term
Railway operations		Railway operations	Company's performance	Market	Introduction of sightseeing trains to explore new resources	Improvement of reputation through tourist transport with minimum environmental burden, enabling brand strategies for coexistence with nature and co-creation with communities	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large
			Sustainability performance	Sustainable use of natural resources	Regional recycling of materials for biofuel	Building of sustainable energy circulation models, resulting in community cooperation and waste reduction	(Not confined to particular areas) Broadly throughout Kyushu	Short to medium term	Large
Overall			Company's performance	Capital flow and capital procurement	Utilization of sustainable finance	Low-interest capital procurement, improvement of reputation for ESG, strengthening of engagement with investors	—	Short to medium term	Large

5 Prepare: Consider Response Measures

The Group is strengthening its response to the main risks and opportunities identified and evaluated during the "Assess" phase based on business continuity and conservation of natural capital in areas around our railway lines. Below is a list of measures, organized for each value chain.

Value chain	Response to risks	Response to business opportunities
Railway facilities (Track & Facilities, Electrical Engineering, stations)	Construction ■ Physical risks Increased risk of flood damage due to topographical modification <ul style="list-style-type: none"> • Planning for river basins using the principles of hazard maps and river basin flood control • Introduction of materials and structures to increase drainage of rainwater around rolling stock depots and stations • Strengthening of emergency response framework by designing extra capacity in drain facilities at the construction stage and setting standards for advance evacuation and service suspension decision Destruction of ecosystems of ballast quarries <ul style="list-style-type: none"> • Establishment and enactment of Green Procurement Guidelines ■ Transition risks Delay in measures for a circular economy/criticism of mine development leading to decline of forests/ criticism for unsustainable use of wood <ul style="list-style-type: none"> • Establishment and enactment of Green Procurement Guidelines 	Cooperation with natural tourism resources <ul style="list-style-type: none"> • Creation of new tourist value using natural capital, tourism development through co-creation with communities, local governments, and businesses Development of environmentally friendly civil engineering technology <ul style="list-style-type: none"> • Promotion of construction of structures suited to regions' natural conditions, leading to building of more sustainable railway infrastructure with nature-friendly civil engineering technologies
	Railway operations ■ Physical risks Increase in waste from restaurant tenants <ul style="list-style-type: none"> • Limitation of waste disposal through appropriate management and thorough sorting of waste in cooperation with tenants • Reuse of waste through promotion of introduction of reused containers and resource recycling, community cooperation-based resource usage ■ Transition risks Destruction of landscapes around renewable energy generation sites and opposition from residents <ul style="list-style-type: none"> • Thorough confirmation of environmental friendliness, such as requirements for consideration of landscapes and coexistence with communities, when selecting partners • Disclosure of community cooperation policies related to introduction of renewable energy 	Joint business with local governments and partner companies <ul style="list-style-type: none"> • Promotion of joint businesses with close community ties to involve communities in procurement of renewable energy and build an image as a trustworthy company • Transparent communication and involvement of outside parties regarding the above initiatives Events in cooperation with commercial facilities and nature tourism <ul style="list-style-type: none"> • Promotion of regions' appeal and expansion of market opportunities by establishing station buildings as information centers serving as "gateways to nature tourism" and promotion of tourism through cooperative plans with regional tourism resources
	Maintenance ■ Physical risks Flooding and caving in of aging tunnels <ul style="list-style-type: none"> • Upgrades and introduction of technology for improvement and reinforcement methods, emergency response system-building and drills Delay in response to land subsidence and collapse <ul style="list-style-type: none"> • Thorough inspection of civil engineering facilities and risk-based prioritization of maintenance and management ■ Transition risks Environmental impact by weedkillers <ul style="list-style-type: none"> • Thorough optimization of use through effective decisions on scope and method of spraying, deliberation and introduction of alternative methods Issues with harmful substances (PCB, etc.) from insulation, etc. <ul style="list-style-type: none"> • Thorough communication of Company-wide risks and response measures through administrative documents, meetings to share issues and deliberate on response measures with officers and personnel 	Development of technologies to extend the life of facilities <ul style="list-style-type: none"> • Introduction of environmentally friendly materials and construction methods to extend the life of facilities, optimizing resource usage and reducing the burden on natural capital Joint conservation activities with residents of communities <ul style="list-style-type: none"> • Nature conservation activities in cooperation with communities to build trust and increase corporate value

Value chain		Response to risks	Response to business opportunities
Rolling stock	Manufacturing	<p>Transition risks</p> <p>Delay in recycling measures</p> <ul style="list-style-type: none"> Renovation of existing trains and transition from TBM to CBM to use various parts for longer and enable longer use of rolling stock Strengthening of recycling framework to promote reuse of waste <p>Environmental and human rights risks at supplier sites</p> <ul style="list-style-type: none"> Establishment and enactment of Green Procurement Guidelines 	<p>Optimization of costs by extending life cycles of rolling stock</p> <ul style="list-style-type: none"> Regular inspection and repair of railway rolling stock to keep rolling stock in usable condition for a long period of time by extending the life of rolling stock to around 40 years Renovation of trains as necessary to further extend the life of rolling stock and conserve energy Transition from TBM to CBM with the aim of extending the usage cycle of rolling stock parts
	Railway operations	<p>Physical risks</p> <p>Slope collapses and land subsidence due to changes in environment around the tracks</p> <ul style="list-style-type: none"> Thorough inspections of civil engineering facilities and identification of causes of environmental changes to promote risk assessment and formulation of priority repair plans and optimize reinforcement work and design <p>Transition risks</p> <p>Tightening of exhaust regulations and environmental standards</p> <ul style="list-style-type: none"> Replacement of rolling stock with storage battery-powered diesel electric trains and retrofitting with high-efficiency engines <p>Distrust from residents of community about exhaust and noise</p> <ul style="list-style-type: none"> Engine shutdown during long stops and limiting acceleration by indicating extra time between stations. Measures such as transition to long rails, improvement of switches, and sanding of wheels 	<p>Introduction of sightseeing trains and services that contribute to the environment to explore new resources</p> <ul style="list-style-type: none"> Planning and operation of sightseeing trains that utilize regions' unique natural and cultural resources Creation of added value through combinations of nature experiences and tourism to strengthen community cooperation and build sustainable tourism models Reduction of environmental burden through railway use and introduction of services that contribute to conservation of natural capital <p>Regional recycling of materials for biofuel</p> <ul style="list-style-type: none"> Deliberation of scheme for community cooperation through demonstration experiments of fuel oil containing biofuel
	Maintenance	<p>Transition risks</p> <p>Water pollution from oil, detergents, etc. in waste water</p> <ul style="list-style-type: none"> Introduction of detergents with minimal environmental burden and thorough maintenance and regular inspections of functions of waste water treatment facilities <p>Potential risks of soil and groundwater pollution</p> <ul style="list-style-type: none"> Appropriate storage and strengthening of leak prevention for chemical substances, fuels, etc. under laws and regulations such as the PRTR Act <p>Issues regarding treatment of asbestos and PCB in aging facilities</p> <ul style="list-style-type: none"> Thorough legal compliance and safety standards for safe removal and treatment work Appropriate treatment and management of waste and planned upgrades and replacement of aging facilities 	<p>Relocation of Kokura Rolling Stock Center to improve medium to long term corporate value</p> <ul style="list-style-type: none"> Limitation of environmental burden through energy-efficient design and introduction of renewable energy, building of efficient inspection framework Limitation of waste and improvement of recycling efficiency, appropriate management of chemical substances and oil to reduce risks of soil and water pollution Promotion of harmony with ecosystems through greening of premises
Other	—	<p>Utilization of sustainable finance</p> <ul style="list-style-type: none"> Building of capital procurement strategies reflecting natural capital risks and opportunities, utilization of green bonds, sustainability-linked loans, etc. Establishment of internal framework and enhancement of disclosure of information to ensure transparency about use and effects of procured funds 	

Risk Management

The Group has positioned responses to natural capital-related issues such as climate change adaptation, promotion of resource recycling and conservation of biodiversity as key management issues for building a sustainable society and strengthened its framework for managing risks and opportunities related to all of our environmental measures (related to climate change, resource recycling, biodiversity, etc.)

Our ESG Strategy Committee, chaired by the President and CEO, analyzes risks and opportunities associated with natural capital as part of our TNFD measures in order to categorize and assess risks to the Group's businesses. The Committee regularly reviews progress on our climate change adaptation and environmental targets, dependencies and impacts on natural capital by our railway business's value chains, and the risks and opportunities that arise from

these dependencies and impacts. Matters are reported to the Board of Directors when necessary.

The JR Kyushu Group Human Rights and Corporate Ethics Committee, which was established to monitor social issues such as human rights, labor, and ethics, identifies risks and issues related to human rights to be monitored by the Board of Directors. Risks related to natural capital are mainly handled by the aforementioned ESG Strategy Committee, but the results of the two committees' discussions and the details of their analyses are shared as necessary and reflected in reporting to Board of Directors and supervision.

The Group will use TNFD recommendations to comprehensively ascertain connections to natural capital in our business activities and carry out advanced risk management according to the characteristics of our businesses.

● Risk assessment and management process



Metrics and Targets

Under the JR Kyushu Group Environmental Vision 2050, the Group is working together with communities, customers, and business partners to realize a society that coexists with nature. The three pillars of this vision are "Realization of a decarbonized society," "Realization of a circular society," and "Realization of a nature-friendly society." Under this vision, we appropriately ascertain and manage connections to natural capital in our railway business and other Group business activities, visualize environmental burden, and work on ongoing improvements.

Based on our measures to address the main risks and opportunities we have identified and evaluated according to the LEAP approach, we have currently set the following targets based on the core global disclosure indicators related to nature-related dependency and impacts defined by TNFD recommendations. At this stage, we have not established metrics or targets for core global disclosure indicators related to nature-related dependency and impacts, but we plan to continuously deliberate on expansion of our disclosures as we conduct more in-depth analysis and establish monitoring frameworks going forward.

We are also working on proprietary initiatives to realize a nature-friendly society in addition to the metrics in the TNFD recommendations. Specifically, we have set the following targets and aim to realize a positive cycle of sustainability through conservation of Kyushu's abundant nature and biodiversity, community invigoration using the natural bounties from local ecosystems, and conservation of tourism resources.

Details on these targets and our roadmap and steps to achieving them are explained in the JR Kyushu Group Environmental Vision 2050. Refer to the link below for details.

https://www.jrkyushu.co.jp/company/ir_eng/esg/pdf/Environmental_Vision_en.pdf



● Core global disclosure indicators related to nature-related dependency and impacts

Measurement indicator number	Cause of change in nature	Indicators	Related measurement indicators	Targets			
				Short term: By 2027	Medium term: By 2035	Long term: By 2050	
—	Climate change	GHG emissions	Group-wide Scope 1 and 2 emissions	—	60% reduction (compared to FY2023)	Net zero	
C2.1	Pollution/ decontamination	Waste water and exhaust	Water usage (relative to sales)	Reduce every fiscal year		—	
C2.2			Generation and processing of waste	Recycling rate of garbage from stations and trains (aluminum/PET)	50%	70%	100%
				Recycling rate of construction waste	98%	100%	100%
				Recycling rate of raw garbage from station buildings	—	50%	75%
				Recycling rate of waste cooking oil	—	100%	100%
Bottle to Bottle recycling rate	90%	100%	100%				

● Proprietary initiatives to realize a nature-friendly society

Category		Targets		
		Short term: By 2027	Medium term: By 2035	Long term: By 2050
Conservation of nature and biodiversity	Community cooperation	Build community partnerships	Carry out conservation projects through community cooperation	Contribution to the realization of a society that coexists with nature
	Outside our businesses	Initiatives for conservation of biodiversity: 5	Utilize functions of natural environments through conservation and restoration of ecosystems	
	Within our businesses	Reduce impact of business operations on biodiversity	Expand scope of reduction of impact on biodiversity by revising business and construction methods	
Regional vitalization and conservation of tourism resources		Promotion of eco-tourism	Contribute to regional economies through eco-tourism	Building and promotion of a circular tourism model

Conclusion

The Group conducted a multifaceted assessment of our railway business's dependency and impacts on natural capital and risks and opportunities through the LEAP approach based on TNFD recommendations. In particular, at sites with a particularly large connection to nature, such as rolling stock depots, we analyzed risks based on geographical characteristics, which reaffirmed the importance of community-rooted considerations.

Based on these observations, we will bring about evolution of our business practices, with our coexistence with nature as a starting point, to realize our aim to "reduce environmental burden and foster coexistence with local communities" in our Environmental Vision. We aim to create abundance and positive cycles in local communities through visible initiatives such as

strengthening disaster measures, developing sightseeing trains that utilize regions' resources, and promoting green procurement.

Going forward, we will continue to engage with Kyushu's abundant nature and progress as a railway company that creates harmony between the environment, society, and the economy. In addition to cooperating more closely with communities and balancing conservation of natural capital with social and economic development, each of our employees will contribute to local communities through their daily work. And by thinking and acting together with our stakeholders, we will create nature and communities that future generations can be proud of.

