

— JR Kyushu Group —
Environmental Vision
2050





Message from the President

—— JR Kyushu Group Environmental Vision 2050 ——

The JR Kyushu Group recognizes that environmental responsiveness is one of the most important issues for the company, and has been actively promoting efforts to realize a sustainable society, based on its basic environmental philosophy and policy. We have formulated the “JR Kyushu Group Environmental Vision 2050” to provide a clearer and more concrete direction for this philosophy and policy. In addition to addressing climate change, which we have been working on, we aim to solve environmental issues by taking an integrated approach to the three areas of promoting resource recycling circulation and protecting biodiversity. By doing so, we will not only minimize the impact of our business activities while living in harmony with Kyushu's rich natural environment, but we will also take a proactive approach to solving environmental issues by viewing them as new business opportunities. Under this newly formulated environmental vision, we have set specific goals for a sustainable future and have begun taking actions to realize them.

With regard to climate change, we will continue reducing GHG emissions, working toward a new, more ambitious target of a 60% reduction by the 2035 fiscal year compared to the 2023 fiscal year, as well as strengthening initiatives to promote behavioral change throughout society to realize a decarbonized society. To promote resource recycling, we are implementing recycling and efficient usage of water resources and creating new business opportunities to increase our competitive edge as a company. In addition, we will minimize the impact of our business activities on the environment while actively getting involved in the protection of ecosystems and working together with local communities to promote sustainable tourism, utilizing eco-tourism to protect communities' natural resources and promote their appeal.

The aim of these initiatives is to reduce environmental burden and foster coexistence with local communities from a long-term perspective. Addressing environmental issues is not easy, but we view this not as merely a challenge but as an opportunity to transform Kyushu's future. All of our employees are continuing to work actively to reduce our environmental burden and create new business opportunities. We will work together with communities to take decisive steps forward in realizing sustainable growth and building a better future for Kyushu.

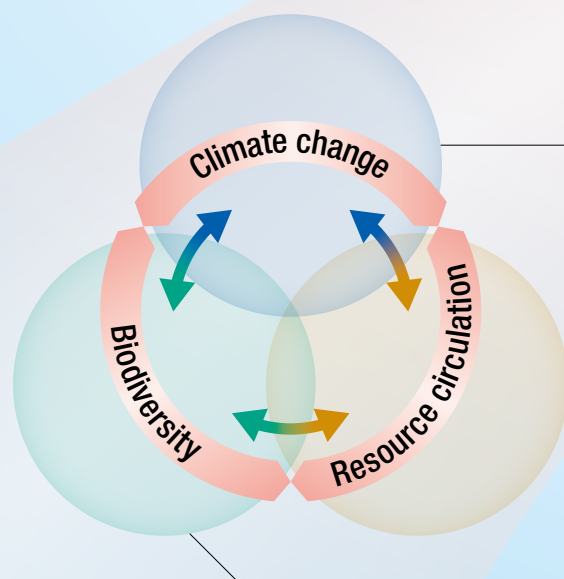
Yoji Furumiya

Representative Director, President, Corporate Officer, and Chief Executive Officer, Kyushu Railway Company

Creating a future in harmony with nature through co-creation with local communities, customers, and business partners

Material issues

An integrated approach, connecting and coordinating activities across these areas.



**Realization
of a decarbonized society**

**Realization
of a circular society**

**Realization
of a nature-friendly society**

Co-creating the Future

We will utilize the network we have developed through our businesses to connect people and communities, working together with everyone involved in the JR Kyushu Group to solve issues in communities and society together and striving to build a nature-rich environment.

Through mobility services that create connections and community development that draws on the distinctive characteristics of each region, we will create a future in harmony with nature and a Kyushu that everyone will want to live in and visit.

The JR Kyushu Group's development of environmental initiatives and integrated approaches

Present situation

Integrated approach

Item	Theme	Initiative
Policy	Basic Principle and Basic Policies	Policy on environmental conservation activities
Strategies	Material issues	Realization of a decarbonized society
Climate change	CO ₂ reduction	Carbon neutral by 2050
		Interim target for 2030: 50% reduction (compared to FY2013)

Our material issue regarding the environment has been revised from **"Realization of a decarbonized society"** to **"Developing businesses in harmony with the environment"**, and we are taking an integrated approach to environmental issues, covering both **climate change** and additional issues such as **resource circulation** and **biodiversity**. To accomplish this, we have established a new **Environmental Vision**.

Item	Theme	Initiative
Policy	Environmental Vision	<ul style="list-style-type: none"> Specific long-term vision and targets Roadmap established Approach environmental activities not only as a conservation activity but also as a business strategy
Strategies	Material issues	Developing businesses in harmony with the environment (climate change, resource circulation, biodiversity)
	Disclosure	Appropriate disclosure of information
Climate change	GHG reduction	Carbon neutral by 2050 Interim target for 2035: 60% reduction* (compared to FY2023)
	Adaptive measures	Building a disaster-resilient society
	Behavior change	Working together with customers and various business partners to promote decarbonization
Resource circulation	Waste reduction	Improvement of recycling rate
	Water resources	Reduction of usage, pollution Control
Biodiversity	Turning resource circulation into a business	Deployment as a business
	Biodiversity conservation	Promotion of initiatives inside and outside our businesses
	Conservation of tourism resources	Promotion of eco-tourism

* Expansion of interim GHG emission reduction target from JR Kyushu only to entire Group

Summary

Vision and long-term KPIs (2050)

Climate change

Realization of a decarbonized society

Vision

- Promotion of specific initiatives throughout the Group for the decarbonization of society
- Provision of modes of transportation that further contribute to the environment
- Community development adapted to risks of natural disasters and mobility services that are more resilient to disasters, providing greater peace of mind in people's daily lives.
- Cooperation with communities, customers, and business partners to promote behavioral change to realize a decarbonized society

Long-term KPI (2050)

- Net-zero GHG emissions
- Working together with customers and various business partners to promote decarbonization
- Working together with communities to build a disaster-resilient society with minimal impact from climate change

Resource circulation

Realization of a circular society

Vision

- The challenge to achieve zero waste to establish a circular economy
- Realization of a sustainable water cycle built on Kyushu's abundant water resources

Long-term KPI (2050)

- Various recycling rates (100% of garbage from stations and trains/100% of construction waste/75% of raw garbage/100% of waste cooking oil/100% Bottle to Bottle)
- Usage rate of environmentally friendly containers: 100%
- Strengthening and development of measures against food waste
- Reduction of water usage through recycling and minimization of water risks through measures to prevent water pollution
- Building an economic model with resource recycling through our business

Biodiversity

Realization of a nature-friendly society

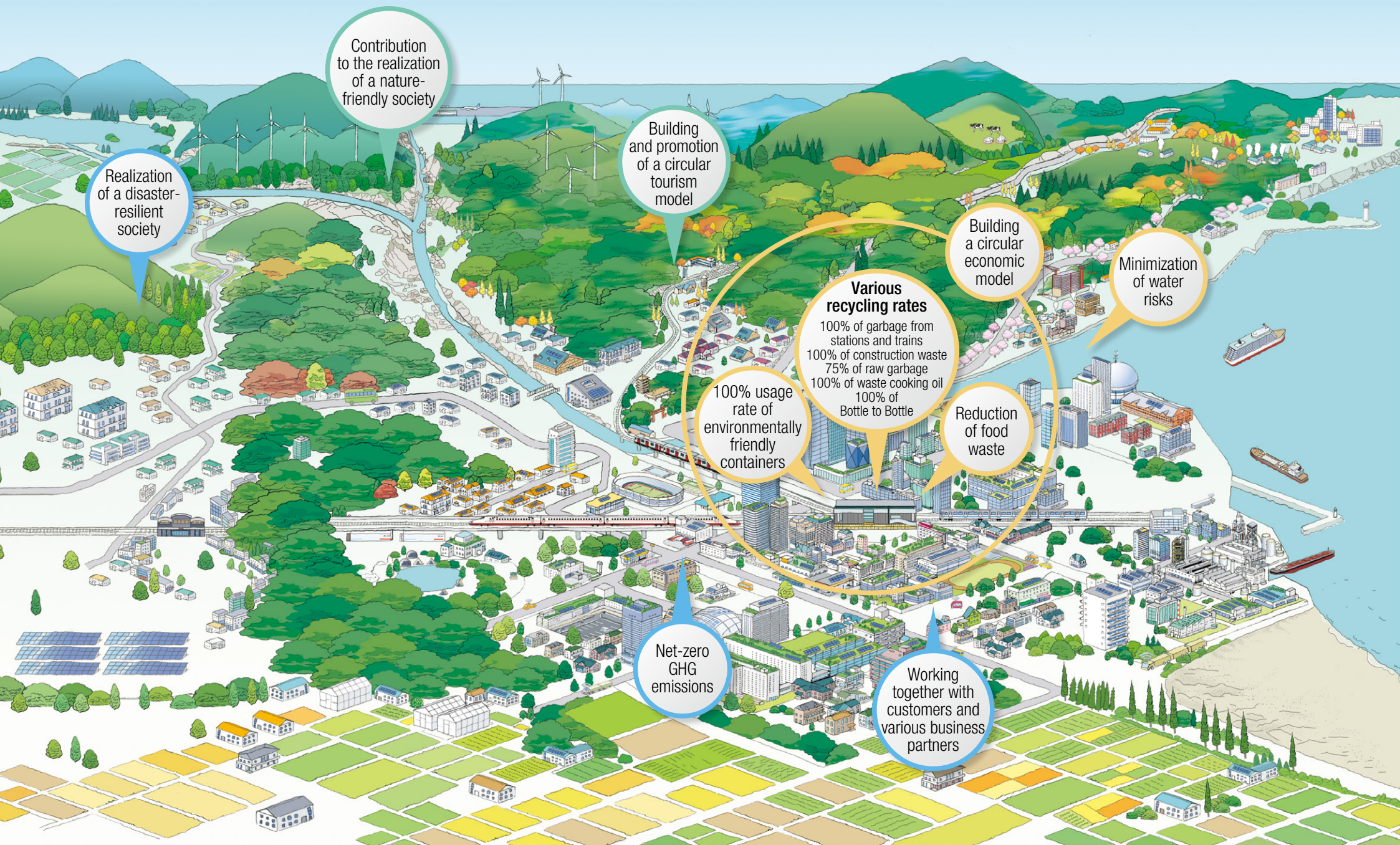
Vision


- Conservation of Kyushu's abundant nature and biodiversity
- Utilization of natural bounties from ecosystems to realize a positive cycle of regional vitalization and conservation of tourism resources

Long-term KPI (2050)

- Contribution to the realization of a nature-friendly society through activities to maintain, recover, and enhance natural capital
- Building and promotion of a circular tourism model with mutual benefits between local economies and conservation of biodiversity
- More sophisticated analysis of biodiversity and further disclosure to outside parties

Long-term KPI (2050)



Category	Short term : By 2027	Medium term : By 2035	Long term : By 2050
Targets			Net- zero GHG*1 emissions
	60% reduction of GHG emissions (Scope 1 + 2*2) (compared to FY2023)		
	Set target for reduction of GHG (Scope 3) emissions	Accelerate reduction of Scope 3 emissions throughout supply chain	
<div> GHG emissions reduction</div> <div>Specific measures</div>	Promote upgrades to energy-saving train cars		100% energy-saving train cars
	Roll out energy-saving driving in all areas (mainly local trains, etc.)	Roll out energy-saving driving in all areas 5% reduction of electricity used in train operations	Build on this by utilizing self driving technology 15% reduction of energy usage in train operations
	Promote introduction of renewable energy	Convert 30% of electricity used in train operations to renewable energy	Decarbonize electricity used in train operations and the Company's facilities through utilization of renewable energy and new technologies and conversion of fuel
	Complete demonstration testing of biodiesel fuel (BDF) and verify new alternative fuels	Promote use of alternative fuels	
	Implement energy saving at Company facilities and promote transition to advanced operations		
	Expand grid-based storage battery business	Expand business domain of storage battery business and effectively utilize storage batteries in existing businesses	Utilize storage battery technology to contribute to popularization of renewable energy and steady supplies of energy
	Adaptive measures	Strengthen measures for adaptation to climate change through both hard and soft disaster protection measures	
Behavior change	Promote services that contribute to the environment to encourage use of railways and increase disclosures about various initiatives		Work together with customers and various business partners to promote decarbonization

*1 GHGs (greenhouse gases) are gases that contribute to global warming, such as carbon dioxide and methane

*2 Scopes are based on the GHG Protocol (international standards for measuring and reporting the greenhouse gas emissions of companies and organizations)

Climate change

Realization of a decarbonized society

Roadmap

2027

2035

2050

60% reduction (compared to FY2023)
of GHG emissions (Scope 1 + 2)

Net zero
GHG emissions

Scope1
Scope2

Continue demonstration testing of biodiesel
fuel and **verify new alternative fuels**

Promote use of alternative fuels

Decarbonize electricity used in train operations
through fuel conversion and utilization of new technologies

Promote upgrades to **energy-saving train cars**

100% energy-saving train cars

Roll out **energy-saving driving** in all areas
(mainly local trains, etc.)

Roll out energy-saving driving in all areas
5% reduction of electricity used in train operations

Build on this by utilizing autonomous driving technology
15% reduction of electricity used in train operations

Promote introduction of **renewable energy**

Convert **30% of electricity used in train
operations** to renewable energy

**Decarbonize electricity used in train operations and
the Company's facilities** through utilization of renewable
energy and new technologies

Implement energy saving at Company facilities and **promote transition to advanced
operations**

Expand **grid-based storage battery
business**

Expand business domain of storage battery
business and **effectively utilize** storage
batteries in existing businesses

Utilize storage battery technology to contribute to
popularization of renewable energy and **steady
supplies** of energy

Scope3

Deliberate on targets for Scope 3 reductions

Accelerate reduction throughout supply chain

Ongoing updates on plan, action plan, and KPIs

Climate change

Realization of a decarbonized society

Roadmap

2027

2035

2050

Adaptive measures

Strengthen measures for adaptation to climate change through both hard and soft disaster protection measures

- Take safety and disaster prevention measures such as evacuation drills for cases where flooding is likely to occur and **setting up waterproof facilities** and **introduce advanced disaster prevention technologies and systems**
- **Strengthen disaster prevention infrastructure throughout region** by selecting locations based on hazard maps and registering evacuation centers for the greater area and facilities for stranded people
- **Improve accuracy of operation management by introducing real-time weather data analysis system** and introducing scheduled suspensions of services based on weather forecasts

Work together with communities to **build a disaster-resilient society** with minimal impact from climate change

Behavior change








Promote services that contribute to the environment to encourage use of railways and increase disclosures about various initiatives

- Further develop and roll out services that contribute to the environment, such as Green EX
- Provide seamless mobility services to facilitate smoother mobility and promote use of railway
- Increase PR of the above initiatives to promote understanding of our environmental advantages

Work together with customers and various **business partners** to promote decarbonization

Ongoing updates on plan, action plan, and KPIs

KPIs

Category	Short term : By 2027	Medium term : By 2035	Long term : By 2050
 Garbage from stations and trains (aluminum/PET)	Recycling rate: 50%	Recycling rate: 70%	Recycling rate: 100%
 Construction waste	Recycling rate: 98%	Recycling rate: 100%	Recycling rate: 100%
 Raw garbage and waste cooking oil from station buildings	Appropriately manage raw garbage and waste cooking oil and build a recycling framework for these	Recycling rate of raw garbage: 50%	Recycling rate of raw garbage: 75%
		Recycling rate of waste cooking oil: 100%	
 Environmentally friendly containers and food waste (convenience stores)	Promote use of environmentally friendly containers	Usage rate of environmentally friendly containers: 60%	Usage rate of environmentally friendly containers: 100%
	Promote initiatives to reduce food waste	Develop and strengthen initiatives to reduce food waste	
 Effectively utilize used PET	Bottle to Bottle recycling rate: 90%	Bottle to Bottle recycling rate: 100%	
 Water resources	Water usage (relative to sales*): reduce every fiscal year <small>*Water usage relative to sales (1,000m3 per 100 million yen)</small>		Reduce water usage through recycling and minimize water risks through measures to prevent water pollution
	Appropriately manage water pollutants according to laws and regulations	Improve quality of treated water by gradually reducing sources of pollution	
 Deployment as a business	Deliberate on business model	Develop businesses and increase scale	Build an economic model with resource recycling through our business

Realization of a circular society

Roadmap

2027

2035

2050



**Garbage from
stations and
trains**
(aluminum/PET)

Recycling rate of garbage from stations and trains: 50%

Promote separation and collection and **clearly define treatment route**
Approach local governments and affiliated treatment providers

Recycling rate of garbage from stations and trains: 70%

Promote **greater awareness** of resource recycling among customers through measures such as introducing incentive programs
Work together with local governments and affiliated treatment providers to **improve treatment methods**



**Construction
waste**

Recycling rate of construction waste: 98%

Recommend **use of recyclable building materials** and promote recycling through **separation and dismantling**

Recycling rate of construction waste: 100%

Develop and utilize construction methods and technologies with excellent emission reduction



**Raw garbage and
waste cooking
oil from station
buildings**

Appropriately manage and reduce raw garbage and waste cooking oil and build a separation framework for these

Work together with tenants to promote separation and collection
Promote reduction through meal sharing methods, etc.
Expand collection sites and **promote separation and collection** of waste cooking oil

Recycling rate of raw garbage: 50%

Strengthen separation and collection processes for raw garbage and **improve efficiency of collection**

Recycling rate of waste cooking oil: 100%

Strengthen cooperation with BDF manufacturers and **optimize recycling process** for waste cooking oil



**Environmentally
friendly
containers and
food waste**
(convenience stores)

Promote environmentally friendly containers

Promote use of containers made with **biomass plastic** and **recycled PET**
Introduce biodegradable plastic

Usage rate of environmentally friendly containers: 60%

Promote use of containers made with **biomass plastic** and **recycled PET**
Expand introduction of **biodegradable plastic**

Promote initiatives to reduce food waste

Lengthen lives of products
Apply system for discounts based on **management of best-before dates**
Improve ordering accuracy for event products, etc.

Develop and strengthen initiatives to reduce waste

Reduce waste by improving technologies to preserve freshness

Recycling rate of garbage from stations and trains: 100%
Recycling rate of construction waste: 100%
Recycling rate of raw garbage: 75%
Recycling rate of waste cooking oil: 100%
Usage rate of environmentally friendly containers: 100%

Develop existing initiatives and **introduce new technologies**

Ongoing updates on plan, action plan, and KPIs

Resource circulation

Realization of a circular society

Roadmap

2027

2035

2050



Effectively utilize used PET

Bottle to Bottle recycling rate: 90%

Expand collection sites and **promote cooperation** with collection companies

Bottle to Bottle recycling rate: 100%

Work together with other companies on **research and development of recycling technologies**



Water resources

Reduction of water usage: Reduce compared to previous fiscal year

Introduce water-saving toilets
Promote reuse of water in station buildings,
etc.

Appropriately manage water pollutants according to laws and regulations

Appropriately manage water pollution in
accordance with laws and regulations

Set up new well water plants for large
development projects
Promote reuse of gray water and treated water
through new facilities, etc.

Improve quality of treated water through an approach that
gradually reduces sources of pollution

Deliberate on construction methods with
minimal environmental pollution and **reduce
sources of pollution** by changing materials

Reduce water usage through recycling and minimize water risks
through measures to prevent water pollution

Develop existing initiatives and **introduce new
technologies**



Deployment as a business

Deliberate on business model

Deliberate on **new business models** related
to resource recycling
Establish **projects** and verify results

Develop businesses and increase scale

Fully roll out projects
Work together with local governments and
companies to **expand businesses**



Build an economic model with resource recycling through our business

Work together with local communities to **realize
a circular society**

Ongoing updates on plan, action plan, and KPIs

Realization of a nature-friendly society

KPIs

Category		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 local 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		Promote eco-tourism	Contribute to regional economies through eco-tourism	Build and promote a circular tourism model
Disclosure		Disclosure aligned with TNFD recommendations	More sophisticated analysis of biodiversity and further disclosure to outside parties	

Biodiversity

Realization of a nature-friendly society

Roadmap

2027

2035

2050



Conservation of nature and biodiversity

Community cooperation

Build community partnerships

Work together with local environmental organizations and local governments to **build frameworks** for conservation activities

Outside our businesses

Initiatives for conservation of biodiversity: 5

Carry out activities to create **sound natural environments**

Within our businesses

Reduce impact of business operations on biodiversity

Continue current reduction measures
Identify **new drivers of impact**

Carry out conservation projects through community cooperation

Work together with educational institutions to promote **research and educational programs** related to biodiversity

Utilize functions of local environments through conservation and restoration of ecosystems

Raise awareness about biodiversity among members of communities and tourists to **strengthen conservation activities**

Expand scope of reduction of impact on biodiversity by revising business and construction methods

Introduce design and construction methods that are friendly to the ecosystem and **materials** that are friendly to the environment

Contribution to the realization of a society that coexists with nature

Activities to maintain, recover, and enhance natural capital

Develop existing initiatives and **introduce new technologies**



Regional vitalization and conservation of tourism resources

Promotion of eco-tourism

Raise awareness of **eco-tourism** through measures such as active sharing of information

Contribute to regional economies through eco-tourism

Develop tourist facilities and activity programs that utilize local nature and culture

Building and promotion of a circular tourism model

Mutual benefits between **local economies** and **conservation of biodiversity**

Disclosure

Disclosure aligned with TNFD recommendations

Assess impact and dependency of businesses on natural capital and biodiversity and **establish management frameworks**

More sophisticated analysis of biodiversity and further disclosure to outside parties

More sophisticated analysis that is also based on trends in disclosure regulations

Ongoing updates on plan, action plan, and KPIs

To build a future together

The JR Kyushu Group will carry out initiatives to realize a decarbonized society, a circular society, and a nature-friendly society. We will develop these initiatives together with communities, business partners, and customers. Working toward KPIs, we will minimize our impact on the environment and create a future in coexistence with nature.

