



Addressing Climate Change

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Confronting climate change is a key theme that must be addressed on a global scale. Ongoing global warming in the absence of effective countermeasures will cause drastic climate change that will significantly impact the global environment. Against this backdrop, carbon neutral initiatives to reduce greenhouse gas (GHG) emissions to virtually zero have swiftly been gaining traction worldwide.

ORIX has made addressing climate change one of its material issues, and has stated its intent to proactively promote the renewable energy business, reduce GHG emissions in its own businesses, and comply with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We have also set the key goals of reducing ORIX Group GHG (CO₂) emissions by 50% compared to the fiscal year ended March 2020 by the end of the fiscal year ending March 2030, and achieving net zero emissions by the end of the fiscal year ending March 2050.

ORIX will continue to proactively respond to the risks and opportunities brought about by climate change through its diverse businesses. We will also utilize the TCFD information disclosure framework to strengthen climate change-related governance and risk management through scenario analysis. Based on such measures, we will disclose more specific information on ORIX's climate change initiatives to our stakeholders.

Information Disclosure Based on TCFD Recommendations

ORIX announced its support for the TCFD in October 2020. In November 2021, we began disclosing information in line with the TCFD information disclosure framework.

▶ Page 46 Information Disclosure Based on TCFD Recommendations

1. GHG (CO₂) Emissions Reduction

GHG (CO₂) Emissions Reduction Goals and GHG (CO₂) Emissions

• GHG (CO₂) Emissions Reduction Goals

ORIX has set GHG (CO₂) emissions reduction goals as follows:

- (1) Reduce GHG (CO₂) emissions by 50% compared to the fiscal year ended March 2020 by the end of the fiscal year ending March 2030.
- (2) Achieve net zero GHG (CO₂) emissions by the end of the fiscal year ending March 2050.

ORIX Group GHG (CO₂) Emissions (Baseline Emissions) in the Fiscal Year Ended March 2020

(Unit: Thousand tons CO₂e)

	Emissions	(Scope 1)	(Scope 2)
Environment and Energy segment	1,089	1,069	20
– Two coal-biomass co-fired power plants	941	939	1
Real Estate segment	85	19	66
Total of other segments	93	18	74
Total	1,266	1,107	158

▶▶▶ See [here](#) for details on ORIX Group GHG (CO₂) emissions (baseline emissions) in the fiscal year ended March 2020.

• GHG (CO₂) Emissions

Total Scope 1 and Scope 2 emissions in the fiscal year ended March 2024 were 1,129 thousand tons. Compared to the baseline emissions, this was a decrease of 137 thousand tons. Emissions from the two coal-biomass co-fired power plants amounted to 796 thousand tons, accounting for 70.6% of the total.

ORIX Group GHG (CO₂) Emissions

(Unit: Thousand tons CO₂e)

	FY ended March 2020 (Baseline Emissions)	FY ended March 2024
Scope 1	1,107	991
Scope 2	158	138
Total	1,266	1,129

▶ Page 86 ESG Data ▶▶▶ [Environmental Performance Data](#)

We have roughly estimated the scale of Scope 3 emissions (GHG emissions in the value chain) for the following businesses:

Emissions from Auto, Aircraft and Ships, Real Estate, the power generation and electric power retail business in the Environment and

Energy segment, and investees and borrowers (Category 15).

We disclose numerical data for Categories 6 and 7.

▶ Page 87 ESG Data ▶▶▶ [Environmental Performance Data](#)

Initiatives to Reduce Emissions

• Environment and Energy Segment: Coal-biomass Co-fired Power Plants*¹

Aiming for a 50% reduction in emissions by the end of the fiscal year ending March 2030, we are considering measures including refitting equipment to move to pure biomass combustion and switching to next generation fuels such as hydrogen and ammonia.

During the fiscal year ended March 2024, we continued to discuss decarbonization, confirmed power generation efficiency and costs for the exclusive use of biomass, considered fuel procurement routes, and conducted interviews with customers.

*1 Soma Coal-Biomass Power Plant (Soma City, Fukushima Prefecture, started operation in March 2018, with generation capacity of 112 MW), Hibikinada Coal-Biomass Power Plant (Kitakyushu City, Fukuoka Prefecture, started operation in December 2018, with generation capacity of 112 MW).

• Real Estate Segment

We have formulated a plan to make gradual reductions towards our 50% emissions reduction goal by the fiscal year ending March 2030. Our main reduction initiatives are as follows:

- (1) Make equipment upgrades ahead of schedule at properties we own or operate, and introduce energy-saving equipment, etc.*²
- (2) Adopt renewable energy at properties we own or operate*³
- (3) Use non-fossil certified renewable energy*⁴ and purchase J-credits*⁵

In the fiscal year ended March 2024, we achieved the target amount of reduction. In the fiscal year ending March 2025, we will maintain initiatives to reduce emissions in stages by conserving energy and introducing power from renewable energy.

*2 For properties where we have the authority to renovate facilities.

*3 Install solar panels in logistics facilities developed by ORIX Real Estate, and use renewable energy in those facilities, but if surplus power is generated, supply the environmental value of surplus power to other properties such as office buildings and lodging facilities.

*4 Appropriate for emissions based on electricity usage, which is difficult to reduce in (1) and (2) above.

*5 Appropriate for emissions based on usage other than electricity.



2. Promoting the Renewable Energy Business

ORIX operates power generation businesses around the world as a global renewable energy company. As of March 31, 2024, our generation capacity of power plants in operation around the world, including Japan, was 4.3 GW*¹. Elawan Energy (100% share) and Greenko (approx. 20% share) lead business growth, with Elawan Energy having 11 GW*² and Greenko having 18 GW*² in total generation capacity in operation, under construction, or in development. As of March 2025, we expect to expand the generation capacity of power plants in operation to 6 GW*¹ (7 GW*¹ before considering sale). Our goal is to expand capacity to 10 GW*¹ by March 2030.

Also, in Japan, we are promoting broader adoption of renewable energy through our business of operation, management, and maintenance of power plants that use renewable energy, the energy storage plant business, and the introduction of a third-party ownership model for solar power generation systems.

CO₂ Avoided Emissions

CO₂ avoided emissions at our renewable energy businesses totaled approximately 4.8 million tons for the fiscal year ended March 2024. The year-over-year increase was approximately 0.1 million tons. This was mainly due to the start of operations of new renewable energy power plants at Elawan Energy.

Breakdown by country, region, and generation type is as shown in the chart below.

CO₂ Avoided Emissions through the Renewable Energy Business

(Unit: Thousand tons CO₂)

	Wind Power	Solar Power	Geothermal Power	Hydro Power	Biomass	Total
India	1,222	608	0	320	0	2,150
Japan	0	446	0	0	252	698
U.S.A.	325	68	243	0	7	644
Others	789	432	42	8	0	1,270
Total	2,336	1,553	285	327	259	4,761

▶ Page 87 ESG Data ▶▶▶ [Environmental Performance Data](#)

*1 Net figures that take into account our ownership ratio. If the individual project is a joint venture, we also consider the investment ratio.

*2 Gross figures before taking into account our ownership ratio.

Example Initiatives

ORIX Signs One of Japan's Largest Onsite PPAs with Kansai Airports

ORIX concluded a power purchase agreement (PPA) with Kansai Airports in November 2023. ORIX plans to install solar power generation facilities with a capacity of approximately 23.4 MW, which will be one of the largest onsite facilities in Japan*, at Kansai International Airport and Osaka International Airport, and begin supplying power to each airport from spring 2025. In this project, ORIX established a special purpose corporation (SPC) to serve as the power generation company that will install and operate solar power generation systems with a total capacity of approximately 22.8 MW at Kansai International Airport and approximately 0.6 MW at Osaka International Airport, for a total of approximately 23.4 MW. The Kansai Airports Group expects that electricity generated on-site at the airports will cover approximately 20% of its annual electricity consumption and reduce annual CO₂ emissions by approximately 12,300 t-CO₂.

* According to an ORIX survey



Image of the solar power generation system installed at Osaka International Airport

Elawan Executes Corporate PPA for Amazon

Elawan develops and operates wind and solar power plants in 15 countries, mainly in Spain and elsewhere in Europe, as well as in North America and South America. In 2023, it concluded a PPA with Amazon and began supplying electricity from five solar power plants. In addition, from 2025 it plans to supply environmental value along with the phase-in of approximately 160 MW of electricity generated from two wind power plants and four solar power plants under development in Spain.

This will bring the cumulative total of power supplied to Amazon to approximately 340 MW.



Solar power plant in Spain that started supplying Amazon in 2023



3. Information Disclosure Based on TCFD Recommendations

Information Disclosure Framework / Governance, Strategy, Risk Management, and Metrics and Goals

We disclose climate change-related information in line with the four TCFD pillars, as follows:

Governance

Board Oversight of Climate-related Risks and Opportunities

The Board of Directors provides leadership and guidance for ORIX Group's sustainability. It oversees climate-related risks and opportunities and determines ESG-related material issues and key goals.

At a meeting in 2024, the Board of Directors heard performance reports for the fiscal year ended March 2024 in the following areas.

- (1) Progress toward ESG-related key goals
- (2) Revision of ORIX Environmental Policy
- (3) Disclosure of certain Scope 3 categories

Execution Framework for Assessing and Managing Climate-related Risks and Opportunities

The Group CEO chairs the Sustainability Committee. Committee members include people in charge of segments most directly related to ESG, and other participants will attend as needed so the committee can flexibly accommodate an evolving agenda.

The committee will also call on external experts as necessary.

The Sustainability Committee discusses specific measures to achieve goals as well as conflicts arising between short-term earnings and long-term growth. It also holds discussions on measures to reduce climate change risk based on TCFD recommendations, share information on developments in Japan and internationally that are relevant to sustainability, and discuss matters to report to the Board of Directors.

▶ Page 40 Sustainability Promotion and Governance Structure

Strategy

Climate-related Risks and Opportunities the Organization Has Identified

Climate-related risks and opportunities include physical risks and opportunities brought about by the increase in natural disasters associated with climate change. They also include transition risks and opportunities associated with the transition to a decarbonized society resulting from more stringent climate-related regulations and changes in corporate and consumer preferences.

We expect the following will materially impact ORIX Group:

• Physical Risks and Opportunities

ORIX is exposed to physical risks including higher costs due to business suspension and preventive measures or repairs for damage to operating facilities and offices, higher operating and construction expenses resulting from higher temperatures, higher credit costs from damage to customers, and loss of asset value from damage to investees.

• Transition Risks and Opportunities

ORIX is exposed to transition risks including business suspension, loss of asset value, stranded assets due to more stringent regulations, higher costs associated with carbon emissions, higher credit costs due to deterioration in customer performance, and decreased corporate value of high GHG-emission investees. Associated opportunities include increasing demand for renewable energy.

Scenario Analysis

Our analysis indicates exposure to a certain extent of risk of financial impact in Real Estate and Environment and Energy, but risks are immaterial in other businesses.

- ▶ Page 47 Scenario Analysis Assumptions
- ▶ Pages 88-91 Results of Analysis

Risk Management

When formulating business plans, we collate progress on ESG-related key goals and the policies and KPIs of each business division, report them to the Sustainability Committee, and obtain approval from the Board of Directors. In addition, once every year each business unit holds discussions with the Investor Relations and Sustainability Department and updates the scenario analysis assumptions and results.

Metrics and Goals

Metrics and Goals Used to Assess and Manage Relevant Climate-related Risks and Opportunities

ORIX identified the following four key goals related to climate:

- Reduce ORIX Group GHG (CO₂) emissions by 50% by the fiscal year ending March 2030 compared to the fiscal year ended March 2020.
- Reduce ORIX Group GHG (CO₂) emissions to net zero by the fiscal year ending March 2050.
- Reduce investment in and lending to industries* that emit GHG (CO₂) by 50% by the fiscal year ending March 2030 compared to the fiscal year ended March 2020.
- Reduce investment in and lending to industries* that emit GHG (CO₂) to zero by the fiscal year ending March 2040.

* Refers to fossil fuel mining, palm oil plantations, and forestry financed by ORIX Group overseas subsidiaries.

▶ Page 44 GHG (CO₂) Emissions Reduction

Scope 1, 2 and 3 GHG Emissions

▶ Pages 86-87 ESG Data

ORIX Group companies Robeco and ORIX Asset Management also disclose information as per TCFD recommendations. Please refer to their respective reports for further details.

▶▶▶ [Robeco](#) ▶▶▶ [ORIX Asset Management](#)



Strategy and Scenario Analysis—Assumptions

4° C Scenario

The average global temperature at the end of the 21st century is about 4°C higher than preindustrial levels. Government policies of each country in addition to corporate and consumer preferences remain the same. For example, coal use continues, renewable power generation gains limited traction, no full-scale introduction of carbon pricing, demand for energy-saving real estate remains limited, electric vehicles do not become widespread, and the shift away from ownership-based vehicle usage stalls. The physical effects of climate change become apparent and can be felt directly.

Reference scenarios: Transitional: Stated Policies Scenario (STEPS)*¹ (IEA WEO 2023), Physical: SSP*² 5-8.5 (IPCC AR6)

1.5° C Scenario

The average global temperature increase at the end of this century can be kept at 1.5°C compared to preindustrial levels. Aggressive government decarbonization policies move forward, corporate and consumer tastes change, and society shifts. There will be no significant change from the current physical impact of climate change.

Reference scenarios: Transitional: Net Zero Emissions by 2050 (NZE)*¹ (IEA WEO 2023), Physical: SSP*² 1-1.9 (IPCC AR6)

Degree of Impact Assessment

In the Environment and Energy business and Real Estate business, we own and operate large facilities including large power plants and hotels and inns, and their GHG emissions have become significant. Our scenario analyses have identified risks corresponding to both the 4°C and 1.5°C scenarios, along with significant opportunities in the 1.5°C scenario.

The Auto business and Aircraft and Ships business involve significant GHG emissions from customer use of leased assets, but our scenario analyses identified only limited risk in either scenario. The Finance business and Life Insurance business involve significant GHG emissions from investees and borrowers, but we concluded that the impact of potential risks and opportunities is not material.

Please refer to the scenario analyses on pages 88-91 for more details.

*1 A scenario presented in *World Energy Outlook 2023*, published by the International Energy Agency (IEA) in 2023.
*2 Shared Socioeconomic Pathways: Models for estimating temperature increase presented in the *Intergovernmental Panel on Climate Change Sixth Assessment Report* (IPCC AR6). Each SSP is numbered in ascending order, with higher numbers associated with greater estimated temperature increases.

		Risks	Opportunities
4°C Scenario	Acute	<ul style="list-style-type: none">Supply chain disruptionsDamage to real estate, vehicles, aircraft, and shipsFalling real estate prices in areas likely to be affectedCustomers and investees affectedDamage to sales offices and business locations	<ul style="list-style-type: none">Disaster recovery demand
	Chronic	<ul style="list-style-type: none">Reduced solar power generation efficiencyLonger construction periods because intense heat disrupts more workdaysDecrease in areas available for real estate developmentIncrease in demand for air conditioning	
1.5°C Scenario		<ul style="list-style-type: none">Accelerated phase-out of coal-fired power generationIncrease in business and operating facility costsDecline in corporate value of investees with significant GHG emissionsHigher real estate and ship construction costs due to regulatory complianceFalling prices for used cars with gasoline enginesDeteriorating customer performance	<ul style="list-style-type: none">Increased investment in renewable energyIncrease in demand for energy-efficient real estateIncrease in demand for rental cars and car sharingExpansion in investment opportunities in decarbonization businesses

Environment and Energy

Real Estate

Auto

Aircraft and Ships

Finance

Life Insurance

All of the above businesses



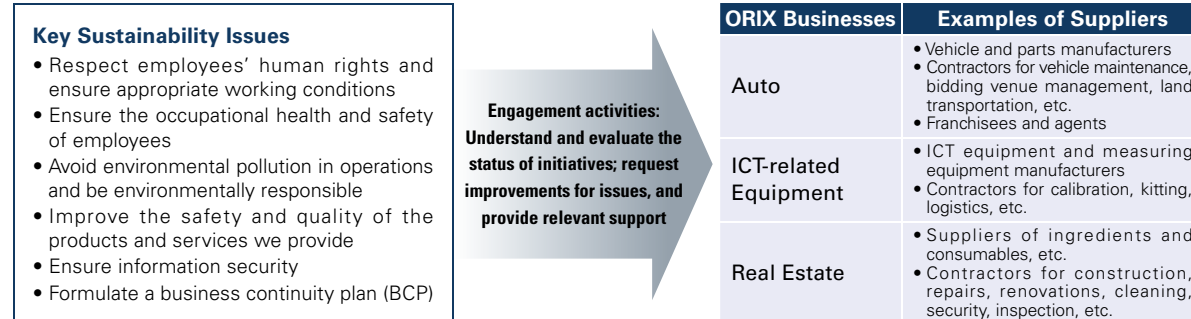
Supply Chain Management

Our Approach

The suppliers who provide ORIX with various goods and services are indispensable to the continuation of our business. ORIX recognizes that it is our responsibility to society to exercise our influence to build a sustainable supply chain. Reflecting this recognition, fair and equitable dealings with our stakeholders is a tenet in the Code of Conduct, which applies to all ORIX Group employees, and we have included our suppliers in the scope of our ORIX Human Rights Policy and ORIX Environmental Policy.

In addition to our long-standing commitment to high service quality, by working with our suppliers to promote sustainability initiatives such as reducing environmental impact and respecting human rights, we aim to continue to be the company of choice for our stakeholders.

Due to factors such as the physical nature of the work involved, ORIX's auto, ICT-related equipment, and real estate businesses have an elevated risk relative to ORIX's other businesses that their suppliers' business activities may have a negative impact on human rights (e.g., worker injury) and a negative impact on the natural environment (e.g., inappropriate disposal of hazardous substances). To build a sustainable supply chain, ORIX will work with its suppliers to establish firm and consistent compliance with laws and regulations related to occupational health and safety and environmental protection.



Initiatives

- In our Company policy regulating the use of outside service providers, which applies across the entire Group, we screen for not only regulatory compliance but also any matters of concern regarding business ethics when selecting or renewing outside service providers.
- We have begun risk identification and data gathering to more accurately assess the situation around our business units that, due to the nature of their business, are especially reliant on their suppliers.
- ORIX Rentec, our ICT-related equipment rental business, conducted its first independent survey of its material suppliers in 2023 to ascertain how strictly they were complying with relevant laws and regulations and what work they were doing regarding sustainability. Going forward, it will continue to conduct periodic surveys to identify and address issues.
- ORIX Corporation and ORIX Life Insurance Corporation have formulated and disclosed declarations regarding their efforts to build partnerships as well as multi-stakeholder policies.

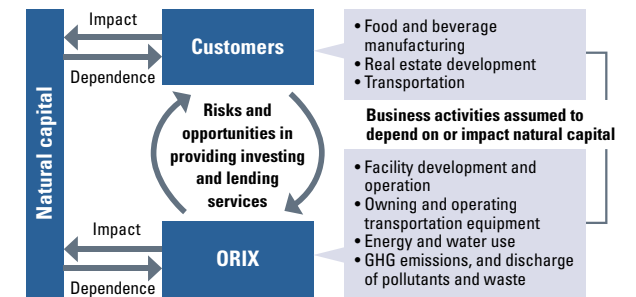
Biodiversity

Our Approach

ORIX Environmental Policy stipulates that we “give due consideration to our impact on biodiversity.” ORIX Group recognizes it both depends on and impacts the natural environment both directly through its own business activities and indirectly through the business activities of its customers.

We will continue to analyze the relationship between our value chain and natural capital from both a risk and an opportunity perspective, and use the insights gained to inform how we can continue to address social issues through our business activities.

The Relationship between Our Business Activities and Natural Capital



Initiatives for Risk Reduction

- Our governance structure constitutes deliberation on sustainability issues, including biodiversity, by the Sustainability Committee, with such deliberations being reported to the Board of Directors.
- As an ESG-related key goal, we have set a target to reduce the balance of our investments and loans in sectors with high environmental impact, such as fossil fuel mining, palm oil plantations, and forestry.
- In addition to the above, we prohibit new transactions in certain sectors and business practices that negatively impact biodiversity such as the manufacture, use, and importing/exporting of internationally prohibited agricultural chemicals, pesticides and herbicides, dynamite fishing, and the handling of specific wildlife species.
- In our renewable energy business, we engage in dialogue with local communities and experts and conduct environmental assessments in accordance with laws and regulations. In addition, we have voluntarily established Guidelines for Environmental and Social Considerations and are taking biodiversity considerations into account when conducting our business activities.

Initiatives to Create Business Opportunities

- Robeco integrates a sustainability perspective, including biodiversity, into its business strategy, and incorporates sustainability into its investment criteria across most of its portfolio. By exerting influence throughout the entire investment process, including selection of investees, monitoring, and exercise of voting rights, Robeco provides not only investment returns but also social impact.
- The SUMIDA AQUARIUM and the KYOTO AQUARIUM provide opportunities for visitors to learn about and be inspired by organisms and ecosystems. They also contribute to biodiversity through conservation, education and research. Specifically, the aquariums engage in conservation activities of rare and endangered species such as sea turtles and giant salamanders, run educational programs such as workshops at the aquariums and at public schools on local ecosystems, and conduct research on preventive veterinary medicine. In addition to collaborating with local governments, regional communities, and educational institutions, we also invite the participation of our business partners who support our aims and objectives.