# Environment

INTRODUCTION

### **Core Principles of Our Sustainability** "Care for the natural environment"

The ORIX Corporate Sustainability Policy states "Care for the natural environment" as one of our core principles that should be implemented in all aspects of our business.

#### Care for the natural environment:

As detailed in our Environmental Policy, we measure and minimize our environmental impacts and look to provide solutions to society's environmental issues through our business. ORIX takes a precautionary approach, as set out in the Rio Declaration, to environmental challenges, meaning we act proactively to manage environmental risks and do not use lack of full scientific evidence as a reason to postpone reasonable actions to prevent environmental damage.

### **Environmental Policy and Goals**

#### **Environmental Policy**

ORIX Group strives to understand the needs of customers and society, contributing environmental and energy solutions through business. We will continue to adapt to changes brought by business expansion and growth.

#### Goals

1. Provide new ecological services that contribute environmental and energy solutions.

2. Understand the impact of business activities on the environment, complying with environmental laws and regulations in order to reduce environmental impact.

ENVIRONMENT

- 3. Raise employee awareness and knowledge in order to respond to environmental issues based on the nature of our business.
- 4. Provide and disclose information on matters required by environmental laws and regulations.

### **Addressing Climate Change**

OUR BUSINESS

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. Under these environmental circumstances, carbon neutral initiatives to reduce GHG emissions to virtually zero have swiftly been gaining traction worldwide. ORIX is contributing to this effort by actively implementing initiatives to mitigate climate change-related risks and help transition to a decarbonized society.

ORIX announced its support for the Task Force on Climate-related Financial Disclosures (TCFD)\* in October 2020. In addition, the Board of Directors identified ESGrelated material issues and focus areas at a meeting held in November 2021. We also set ESG-related key goals in order to link ESG-related material issues to clearly defined actions.

Addressing climate change is one of the ESG-related material issues identified by the Board of Directors. ORIX will boldly build its renewable energy business, reduce the GHG emissions produced from its businesses, and

**ORIX SUSTAINABILITY REPORT 2021** 

comply with TCFD recommendations. One of our ESGrelated key goals is to reduce GHG (CO<sub>2</sub>) emissions by 50% by the fiscal year ending March 31, 2030 compared to the fiscal year ended March 31, 2020. We also intend to reduce GHG (CO<sub>2</sub>) emissions to net zero by the fiscal year ending March 2050.

ORIX implements TCFD recommendations and has begun to disclose information in line with TCFD framework involving governance, strategy, risk management, and metrics and targets. We also conducted a scenario analysis of three business segments with significant exposure to climate change impact.

Reducing GHG emissions will require initiatives not only by ORIX itself but throughout its value chain. For business segments with emissions-intensive value chains, we will examine the possibility of constructing specific action plans in collaboration with other companies to reduce emissions.

ORIX will continue to actively address the risks and opportunities posed by climate change through its diverse portfolio of businesses. In strengthening governance in relation to climate change and enhancing risk management through scenario analyses, we will also employ TCFD's information disclosure framework. Additionally, we will conduct in-depth information disclosure to our stakeholders regarding climate change initiatives.

#### Please also refer to the following pages:

ESG-related Material Issues and Key Goals	→	Page	6
GHG (CO2) Emissions Reduction Goals	→	Pages	12-13
Environment and Energy	→	Page	17

SOCIAL

<sup>\*</sup> The Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD) at the request of the G20. The task force considers how to manage climate-related information disclosure, as well as matters concerning financial institutions. TCFD published its final report in June 2017, encouraging companies and other entities to disclose climate change-related risks and opportunities

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.

The Board of Directors received reports in March and August 2021 on Group progress in scenario analyses and addressing other TCFD recommendations. In addition, at a November 2021 meeting, the Board of Directors decided to establish a new executive body, the Sustainability Committee, to ensure Group-wide consistency in implementing our ESG-related material issues and key goals. The committee will clarify strategic approaches, KPIs, and action protocols, and the results of its deliberations will then be reported to and approved by the Board of Directors.

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

The Group CEO will chair 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 will discuss specific measures to achieve goals as well as conflicts arising between short-term earnings and long-term growth. It will also hold 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.

#### 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

ORIX is exposed to physical risks including disruption in business continuity from damage to ORIX facilities and offices, higher costs resulting from risk mitigation and damage repair, and higher operating and construction expenses resulting from higher temperatures.

Transition Risks

ORIX is exposed to transition risks including disruption in business continuity due to more stringent regulations and higher carbon emissions costs. Associated opportunities include increasing demand for renewable energy.

#### **Scenario Analysis**

We conducted scenario analyses for three ORIX business segments with significant exposure to climate change— Environment and Energy, Real Estate, and Auto (please refer to page 27 for scenario analysis assumptions and to pages 28–29 for analysis results).

Going forward, we will expand analysis to other business segments and enhance analysis methodologies.

#### **Risk Management**

The Investor Relations and Sustainability Department has started discussions with the Credit and Investment Management Headquarters and the Enterprise Risk Management Headquarters on establishing a climaterelated risk management framework.

#### **Metrics and Goals**

#### Metrics 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 (CO<sub>2</sub>) emissions by 50% by the fiscal year ending March 31, 2030 compared to the fiscal year ended March 31, 2020.
- Reduce ORIX Group GHG (CO<sub>2</sub>) emissions to net zero by the fiscal year ending March 31, 2050.
- Reduce investment in and lending to industries\* that emit GHG (CO<sub>2</sub>) by 50% by the fiscal year ending March 31, 2030 compared to the fiscal year ended March 31, 2020.
- Reduce investment in and lending to industries\* that emit GHG (CO<sub>2</sub>) to zero by the fiscal year ending March 31, 2040.
- \* Refers to fossil fuel mining, palm oil plantations, and forestry financed by ORIX Group overseas subsidiaries (page 22)

Please refer to pages 12–13 for GHG emissions reduction goals.

#### Scope 1 and Scope 2 GHG Emissions

Please refer to page 31 for ORIX Group GHG emissions.

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

Robeco
 ORIX Asset Management

### Information Disclosure Based on TCFD Recommendations: Strategy and Scenario Analysis—Assumptions

#### 4°C Scenario (Horizon: Latter 21st century)

The average temperature of the globe at the end of the 21st century is about 4°C higher than pre-industrial levels. The 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, carbon pricing is not introduced, demand for energy-saving real estate remains limited, electric vehicles do not become ubiquitous, and the shift away from ownership-based vehicle usage stalls. The physical effects of climate change become apparent and can be felt directly.

#### Below 2°C Scenario (Horizon: 2030)

The average global temperature increase at the end of this century is less than 2°C compared to pre-industrial levels. Aggressive government decarbonization policies move forward, corporate and consumer tastes change, and society shifts. The physical impact of climate change remains the same as it is today.



Reference scenarios: Transitional: Stated Policies Scenario (STEPS)\*1 (IEA WEO 2020), Physical: RCP\*28.5 (IPCC AR5)

Reference scenarios: Transitional: Sustainable Development Scenario (SDS)\*1 (IEA WEO 2020), Physical: RCP\*2.6 (IPCC AR5)

\*1 A scenario presented in World Energy Outlook 2020 published by the International Energy Agency (IEA) in 2020

\*2 Representative concentration pathways. Models for estimating temperature rise presented in the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5). The models suggests that a larger RCP value will result in a greater rise in temperature

### Information Disclosure Based on TCFD Recommendations: Strategy and Scenario Analysis – Environment and Energy Business

We expect the 4°C scenario to reduce sales and incur recovery costs due to flood damage at power plants. On the other hand, we expect the below 2°C scenario to increase business opportunities from the expansion of the renewable energy market, although there is substantial risk of stranded coal-biomass co-fired power plant assets and higher costs from the introduction of carbon pricing.

	Society		Risks and Opportunities	Financial Impact	Countermeasures and Assessment	
4°C scenario	Climate change accelerates; disasters	Acute Flooding increases	<b>Risk</b> Flood damage to operating facilities such as power plants	<b>Coal-biomass co-fired power plants</b> <b>and solar power plants</b> Repair costs and loss of power sales opportunities	ORIX expects a relatively large impact, but can proactively mitigate that impact through rapid recovery measures based on in-house operation and maintenance* <sup>1</sup>	
	increase in scale and nequency	<b>Chronic</b> Temperature increases	<b>Risk</b> Decrease in power generation efficiency due to higher temperatures	<b>Solar power plants</b> Lower sales due to reduced power generation	Minor impact	
	More stringent regulations in Japan and	More stringent government policies to reduce coal use	<b>Risk</b> Accelerated move away from coal-fired power generation	<b>Coal-biomass co-fired power plants</b> Coal-biomass co-fired power plants become stranded assets	While monitoring government policies, ORIX is considering fuel conversion and installation of CCU <sup>*2</sup> equipment; such measures and other issues may incur commensurate costs	
nario		Introduction of carbon pricing	<b>Risk</b> Higher costs due to carbon pricing	<b>Coal-biomass co-fired power plants,</b> waste processing facilities, and final disposal sites Rising costs	but can proactively mitigate that impact through rapid recovery measures based on in-house operation and maintenance*1 Minor impact While monitoring government policies, ORIX is considering fuel conversion and installation of CCU*2 equipment; such measures and other issues may incur commensurate costs Impact depends on ability to pass on to selling price Online power control*4 to reduce opportunity loss can mitigate impact Power plant ownership potentially mitigates impact	
low 2°C scel			<b>Opportunity</b> Increased business prospects resulting from the expansion of the renewable energy market	Expansion of renewable energy power generation business (PPA* <sup>3</sup> , biogas, geothermal power, wind power, etc.)	ORIX expects a relatively large impact, but can proactively mitigate that impact through rapid recovery measures based on in-house operation and maintenance*1 Minor impact While monitoring government policies, ORIX is considering fuel conversion and installation of CCU* <sup>2</sup> equipment; such measures and other issues may incur commensurate costs Impact depends on ability to pass on to selling price Online power control* <sup>4</sup> to reduce opportunity loss can mitigate impact Power plant ownership potentially mitigates impact	
Be	Corporations increasingly invest in and adopt renewable energy in response to investor and consumer pressure	d Expansion of the renewable energy market and renewable power generation	<b>Risk</b> Increased output constraints <sup>*4</sup> resulting from system capacity limitations	<b>Solar power plants</b> Reduced revenue from electric power sales due to output constraints* <sup>4</sup>	Online power control* <sup>4</sup> to reduce opportunity loss can mitigate impact	
			<b>Risk</b> Increased use of inherently unstable renewable power generation could result in tighter supply and demand and wholesale market prices could soar	<b>Electric power retailing</b> Increase in procurement costs due to rapid increases in wholesale market prices	Power plant ownership potentially mitigates impact	

\*1 Power plant-related operation, inspection, and maintenance to avert damage

\*2 CCU (Carbon dioxide Capture and Utilization): a carbonizing technology that recovers CO<sub>2</sub> emissions and CO<sub>2</sub> from the atmosphere for reuse

\*3 PPA (Power Purchase Agreement): a third-party service delivery model in which ORIX installs solar power generation infrastructure and storage batteries in facilities such as stores owned by customers, and supplies the power generated by the facilities to those customers

\*4 Electric power companies temporarily restrict the connection from the power generation facility to the power grid to avoid oversupply when power demand is low - power sales are not possible during controlled output suppression

The assessment of each risk and opportunity is premised on implementing the above measures. ORIX has not yet decided to implement any countermeasures.

### Information Disclosure Based on TCFD Recommendations: Strategy and Scenario Analysis-Real Estate Business and Auto Business

Real Estate Business: We expect the 4°C scenario to expose some hotels and inns to flooding risk. On the other hand, although it can be assumed that costs will increase as a result of carbon pricing, we expect the below 2°C scenario to increase the value of energy-efficient real estate.

	Society		Risks and Opportunities	Financial Impact	Countermeasures and Assessment	
0	Climate change accelerates; disasters increase in scale and frequency	Acute Flooding increases	<b>Risk</b> Flood damage to operating facilities	Hotel and inn operation Repair costs and loss of sales opportunities	Business continuity planning (BCP) can mitigate impact by minimizing damage	
Scenari			<b>Risk</b> Increased demand for air conditioning at operating facilities	Hotel and inn operation Real estate investment and development Increased air conditioning costs	Minor impact due to renovation with highly efficient air conditioning and rent increases	
4°C		Temperature increases	<b>Risk</b> Longer construction periods due to work interruptions resulting from intense heat on a larger number of days	Condominiums Real estate investment and development Higher construction costs due to longer construction periods	Minor impact due to the use of low-heat concrete that can be poured on days of intense heat	
Below 2°C Scenario	More stringent regulations in Japan and	Introduction of parkon pricing	Risk	Condominiums Real estate investment and development Higher construction material costs	Minor impact due to higher sales prices and rent	
	internationally to decarbonize society	introduction of carbon pricing	Higher costs due to carbon pricing Higher utility costs		Minor impact due to replacement with highly efficient air conditioning equipment during renovation	
	Demand for environmentally responsible real estate will increase, and companies will respond accordingly	Increased demand for energy- and CO <sub>2</sub> -efficient real estate	<b>Opportunity</b> The value of real estate certified as energy-efficient and decarbonized housing will increase	Condominiums Real estate investment and development Increased unit rent, higher sales prices, and increased property sales	Develop environmentally certified properties and make other investments to decarbonize	

Auto Business: We expect the 4°C scenario to increase earnings by increasing disaster recovery demand. On the other hand, we expect a minor impact from the below 2°C scenario, although our conventional businesses are exposed to the risk of contraction due to the growing popularity of electric vehicles. We expect the rental car and car sharing businesses to present opportunities for expansion.

Society		Risks and Opportunities	Financial Impact	Countermeasures and Assessment	
enario	Climate change accelerates; disasters increase in scale and frequency	Acute Flooding increases	Risk Damage to ORIX offices	Damage to large auction venues; water damage to vehicles owned by ORIX	Minor impact because auction venues are decentralized
4°C Sc			<b>Opportunity</b> Disaster recovery demand	Higher earnings due to increased demand for vehicles resulting from reconstruction	Meet supply obligations by ensuring sufficient inventory
2°C Scenario	More stringent regulations and government policies in Japan and internationally to decarbonize society	Electric vehicles gain momentum	<b>Risk</b> Reduced opportunities for maintenance and fueling due to the popularity of electric vehicles	Reduced maintenance revenue and AMS Card* demand	Adding an electric vehicle charging function to the existing AMS Card will largely mitigate impact
			Risk Falling prices for pre-owned gasoline vehicles	Reduced auto sales revenue	Specifying appropriate residual values will largely mitigate impact
Below	Consumer preferences change due to heightened environmental awareness	Accelerated shift away from ownership- based vehicle usage	<b>Opportunity</b> Increased demand for car rentals and sharing	Expansion of the car rental and sharing businesses due to the rise of the sharing economy	-

\* A fuel card that offers the same price at ENEOS, cosmo, Shell, and apollostation service stations

The assessment of each risk and opportunity is premised on implementing the above measures. ORIX has not yet decided to implement any countermeasures.

### Scope 3 Value Chain GHG Emissions and ORIX's Businesses

Companies must identify and reduce their GHG emissions to support the transition to a decarbonized society; however, corporate value chains include SMEs that have trouble identifying their GHG emissions. Therefore, SMEs must often rely on large corporations and government agencies for information; yet, methods of engagement and communication can be limited. The concept of the Scope 3 Standard is to fill this information gap and create a pathway to facilitate engagement and dialogue. ORIX is a global, publicly listed company and we recognize that we are in a position to fill this information gap and also encourage and aid companies in our sphere of influence to meet societal expectations for reduced emissions.

Based on this understanding of our role, we have applied the GHG Protocol's Scope 3 Standard<sup>\*1</sup> to estimating GHG emissions for our Auto, Aircraft and Ships, and Real Estate business segments, which we assume account for a significant proportion of GHG emissions in our value chain.



\*1 The ORIX Group's GHG emissions associated with the use of fuel and electricity are direct Scope 1 emissions and indirect Scope 2 emissions. Indirect emissions not included in Scope 1 and Scope 2 emissions are Scope 3 emissions that occur in the value chain of the reporting company. The GHG Protocol is an organization co-sponsored by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). Issued by the GHG Protocol in November 2011, the Scope 3 Standard outlines requirements and guidance for companies to prepare and publicly report a GHG emissions inventory that includes indirect emissions resulting from value chain activities. Scope 3 emissions are classified into 15 activity-based categories \*2 Japanese operating lease

(Unit: t-CO<sub>2</sub>)

#### 31

### **Environmental Performance Data**

#### ORIX Group's CO<sub>2</sub> avoided emissions

		FY ended March 31, 2017	FY ended March 31, 2018	FY ended March 31, 2019	FY ended March 31, 2020	FY ended March 31, 2021
	Solar Power Generation	346,900	428,700	499,900	540,900	720,000
	<b>Biomass Power Generation</b>	47,800	46,000	43,000	43,700	241,400
	Wind Power Generation	600,900	573,100	739,900	1,157,900	1,324,000
Environment	Hydropower Generation	0	0	0	88,800	112,500
and Energy Business	Geothermal Power Generation	0	544,700	1,073,600	949,500	845,400
	Electricity Supply	190,000	0	0	31,500	49,500
	ESCO Services	67,000	93,700	93,500	100,800	118,800
	Other Environment and Energy Business	300	700	800	100	22,300
Automobile Business		130,300	142,200	157,000	171,100	188,100
Other Business		10,300	7,700	10,800	9,100	5,500
Total		1,393,500	1,836,800	2,618,500	3,093,400	3,627,500

#### Avoided Emissions from the Environment and Energy Business

### Solar Power Generation Beduction calculated from sales

Reduction calculated from sales of power generated from mega-solar and rooftop solar power

 Biomass Power Generation Reduction calculated from sales of power generated from wood chip-fired thermal power station and coal/biomassfired power stations

- Wind Power Generation
   Reduction calculated from sales of power generated from
   wind power plants
- Hydropower Generation Reduction calculated from sales of power generated from hydropower plants
- Geothermal Power Generation
   Reduction calculated from sales of power generated from
   geothermal power plants
- Electricity Supply CO<sub>2</sub> emissions reductions through acquisition of rights to CO<sub>2</sub> emissions reductions from overseas or other companies
   ESCO\* Services
- Providing ESCO Services reduces CO<sub>2</sub> in conjunction with customers' reduced energy use
- \* Energy Service Company

#### Avoided Emissions from the Automobile Business

#### Avoided Emissions from Other Business

#### Scope and Concept

[Calculation Period] From April 1 to March 31 each fiscal year [Calculation Scope] ORIX Group Companies both in Japan and overseas (including affiliated companies)

#### [Basic Concept]

- Calculations are performed by multiplying the reduced amount of activity among customers or society as a whole due to ORIX Group's business activities by CO<sub>2</sub> emissions factors.
- For calculation of business activities in Japan, in principle the emissions factors we use is "alternate value" under the Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System (Act on Promotion of Global Warming Countermeasures). Emissions Factors
  - FY ended March 31, 2017: 0.000587t-CO<sub>2</sub>/kWh FY ended March 31, 2018: 0.000512t-CO<sub>2</sub>/kWh FY ended March 31, 2019: 0.000500t-CO<sub>2</sub>/kWh FY ended March 31, 2020: 0.000488t-CO<sub>2</sub>/kWh FY ended March 31, 2021: 0.000470t-CO<sub>2</sub>/kWh
- For calculation of overseas business activities, in principle we use the emissions factors from each country
- Calculations also include CO<sub>2</sub> reduction credits redeemed during the calculation period after being acquired by ORIX Group
- We calculate CO<sub>2</sub> reduction according to our shareholding
- \* Change in calculation scope: Beginning from data for the fiscal year ended March 31, 2021, we have added Soma Coal and Biomass Power Plant and Hibikinada Coal and Biomass Power Plant (201 thousand t-CO<sub>2</sub> for this calculation period) to CO<sub>2</sub> reduction of biomass power generation

#### ORIX Group's GHG emissions

/1		+ 00 -	
11	mu:	1-0.0267	

	FY ended March 31, 2017	FY ended March 31, 2018	FY ended March 31, 2019	FY ended March 31, 2020	FY ended March 31, 2021
Scope 1	225,599	235,249	907,345	1,138,566	☑ 987,771
Scope 2	158,652	157,463	146,469	112,444	☑ 151,055
Scope 1 & 2 Total	384,251	392,711	1,053,814	1,251,010	☑ 1,138,826

### Scope 1 (Volume of direct GHG emissions occurring from sources that are owned or controlled by the company (fuel consumption, industrial processes))

Combustion of fuels including fuel oil, diesel, gasoline, city gas, coal, biomass, and waste

## Scope 2 (Volume of indirect GHG emissions from purchased energy consumed by the company (electricity use, heat, and steam))

Electricity use and heat (steam, cold water, warm water)

#### **Scope and Method**

[Calculation Period] From April 1 to March 31 each fiscal year

[Calculation Scope] Until FY ended March 31, 2020: Consolidated ORIX Group companies in Japan (excluding investees in our PE Investment business)

FY ended March 31, 2021: Consolidated ORIX Group companies (Japan and overseas, excluding a limited number of overseas offices)

#### [Target Activities] GHG Protocol direct emissions (Scope 1) and indirect emissions (Scope 2) [Calculation Method]

- GHG emissions (converted to CO<sub>2</sub>) are calculated based on the GHG protocol and the "Ministerial Ordinance Concerning Calculation of Greenhouse Gas Emissions Associated with Business Activities of Specified Emitters" (calculated based on Group GHG calculation guidelines).
- GHG emissions, including CO<sub>2</sub> from non-energy sources, methane (CH<sub>4</sub>), and dinitrogen monoxide (N<sub>2</sub>O), are calculated based on company rules concerning the management of environmental information.
- We use the emissions factors under Japan's Mandatory Greenhouse Gas Accounting and Reporting System (emissions factors related to electricity consumption at overseas offices are calculated using the International Energy Agency's CO<sub>2</sub> emissions factors from electricity generation by country).
- Scope 2 emissions include emissions (11 thousand t-CO<sub>2</sub>e) related to power purchases from ORIX Group power generation companies (intra-Group transactions).
- Note: \* Change in calculation scope: Beginning from data for the fiscal year ended March 31, 2021, we have added overseas offices (with limited exceptions) and consolidated Japanese investees from our PE Investment business
  - \* Emissions from coal-biomass co-fired power plants: ORIX operates two coal-biomass co-fired power plants in Japan. One is Soma Coal and Biomass Power Plant in Soma City, Fukushima Prefecture, which started operations in April 2018. The other is Hibikinada Coal and Biomass Power Plant in Kitakyushu City, Fukuoka Prefecture, which started operations in December 2018. Each of these power plants has a total generating capacity of 112MW. Emissions from these two plants for the fiscal year ended March 31, 2021 were 803 thousand t-CO<sub>2</sub>e
  - \* Revision of calculation method for emissions from our waste processing business (incineration facility): We revised our calculation method of the GHG emissions (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) from non-energy sources from the Yorii Plant, a waste incineration facility run by ORIX Environmental Resources Management Corporation, to align the calculation method more closely to actual operations of the facility. Emissions from this facility, based on the new calculation method, for the fiscal year ended March 31, 2021 were 73 thousand t-CO<sub>2</sub>e (129 thousand t-CO<sub>2</sub>e based on the old calculation method)

#### **Third-Party Assurance**

- Since the fiscal year ended March 31, 2017, we have continuously received independent assurance for our GHG emissions.
- ◆ For fiscal year ended March 31, 2021, KPMG AZSA Sustainability Co., Ltd. has provided independent assurance for our GHG emissions. (☑ Items subject to independent assurance) Please see page 32 for details.

### **Third-Party Assurance**



#### Independent Assurance Report

To the Representative Executive Officer, President and Chief Executive Officer of ORIX Corporation

We were engaged by ORIX Corporation (the "Company") to undertake a limited assurance engagement of the environmental performance indicators marked with ⊠ (the "Indicators") for the period from April 1, 2020 to March 31, 2021 included in its Sustainability Report 2021 (the "Report") for the fiscal year ended March 31, 2021.

#### The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report.

#### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with
  the Company's reporting criteria, and recalculating the Indicators.
- Visiting ORIX Resource Recycling Service Corporation's Yorii Plant, selected on the basis of a risk analysis, and making
  inquiries and reviewing materials including documented evidence of Hibikinada Energy Park LLC, as alternative procedures
  to a site visit.
- Evaluating the overall presentation of the Indicators.

#### Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

#### Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG A25A Sustanubelity Co., Ltd.

KPMG AZSA Sustainability Co., Ltd Tokyo, Japan November 12, 2021

### **Reduction of Environmental Impact in Business Processes**

#### **Renewable Energy Utilization**

Utilizing geothermal heat from hot springs at the SUGINOI HOTEL in Beppu

Beppu SUGINOI HOTEL operates the Suginoi Geothermal Power Station, which is the largest geothermal power generation plant in Japan for private use. Its total generation capacity is 1.9MW, and the generated electricity is used in facilities throughout the hotel, covering about 30% of its peak electricity consumption.

#### Powering recycling plants with 100% renewable energy

ORIX Eco Services has decided to convert its two recycling plants—Funabashi Plant and Kasukabe Plant—to use electrical power generated from 100% renewable energy (including the use of nonfossil certified renewable energy sources); they are therefore now powered by CO<sub>2</sub>-free electricity.

#### Head office building for ORIX Auto and ORIX Bank successfully achieves 100% renewable energy

ORIX Auto and ORIX Bank now source the energy used at ORIX Inui Building—which serves as the head office building for both companies—entirely from renewable energy with non-fossil fuel energy certificates; as a result, both head offices effectively use 100% renewable energy. Renewable energy generated at the ORIX Groupoperated woody biomass exclusive combustion power plant is converted into non-fossil fuel energy certificates with tracking information. ORIX Corporation has a significant electricity supply business through which it is able to provide ORIX Auto and ORIX Bank with electricity using these energy certificates.



Suginoi Geothermal Power Station



Kasukabe Recycling Plant



**ORIX** Inui Building

#### GHG Emissions Reduction Hybrid cars as sales vehicles

As of the end of March 2021, ORIX Corporation replaced approximately 95% of the vehicles used by various sales teams with hybrid cars. This initiative helps reduce  $CO_2$  and exhaust gas emissions in relation to our sales activities.



Reducing CO<sub>2</sub> emissions in aquariums Artificial seawater

The Kyoto and Sumida Aquariums have created the first<sup>\*1</sup> Japanese artificial seawater production systems<sup>\*2</sup> and replaced the water in their aquariums with water from this system. The system suppresses the amount of CO<sub>2</sub> generated when transporting sea water in large vehicles and helps to maintain a consistent water quality throughout the year.

\*1 Kyoto Aquarium was the first, followed by Sumida Aquarium \*2 Excludes freshwater

#### Installing a solar power system

The Kyoto Aquarium has reduced its CO<sub>2</sub> emissions by introducing solar power generation systems, advanced ventilation systems, and LED lighting to its buildings.

#### Installing solar panels at the ORIX Theater

The ORIX Theater has undergone renovation and become a multipurpose hall while preserving its traditional building appearance (previously the Osaka Health Pension Center). It also takes environmental factors into consideration, with rooftop greenery and the installation of photovoltaic power panels.

The Kyoto Aquarium



ORIX Theater

Other initiatives **>>** <u>Reduction of Environmental Impact in Business Processes</u>