

**ORIX Asia Limited**

**TCFD Disclosure Report**

**2023**

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## **1. About This Report**

This report provides an overview of ORIX Asia Ltd (“OAL” or “the Bank”) approach to climate-related management. The content covers our climate-related financial disclosures, including governance, strategy, risk management, and metrics and targets. The report's purpose is to inform stakeholders about the potential impact of climate change on OAL’s operations and how it intends to mitigate risks and capitalize on opportunities in the transition to a low-carbon economy. The report provides investors, lenders, insurers, and other stakeholders with valuable insights into the Bank’s preparedness to navigate the challenges and opportunities of a rapidly changing climate landscape.

We recommend that readers refer to the Bank’s Annual Report and the sustainable development-related policies available on our parent company – ORIX Corporation’s website for a more comprehensive understanding of our climate risk management concepts.

## **2. Overview**

OAL considers climate risk as physical and transition risks posed by climate change which may lead to financial and non-financial impacts to the Bank through its manifestation into the various inherent risks faced by the Bank. Physical risk refers to the impacts of weather-related events and long-term shifts in climate leading to disruption in OAL's business operations, damages to property and assets owned or held as collateral, and negatively impacting the asset prices. Transition risk cover those that impact OAL's products and services as a result of the process of adjustment towards a lower-carbon economy. They include the extent to which OAL finance in companies which are in the high carbon emitting segments, and counterparties which become increasingly vulnerable to climate change impact that undermine their credit status. In view of the complex interactions between climate and the social, economic, regulatory, and technological systems, OAL will seek to identify the risks arising from climate change and assess the impact on its business activities and operations.

## **3. Governance**

### **3.1 Climate Risk Management Governance Structure**

OAL recognized the significance of climate change in its corporate structure to improve its ability to adapt to climate risk. The Bank has integrated climate considerations into its current governance structure, encourages a top-to-bottom approach of implementing climate risk management across the organization. The following provides a summary of the Bank's climate risk management governance structure:

**The Board of Directors** of OAL provides oversight of our approach to climate change which includes how the Bank manage climate-related risks and opportunities. The Board is responsible for approving the climate risk statement and climate related strategy. Climate-related issues are brought to the attention of the Board by the Chief Risk Officer of OAL during regular board meetings.

A **Climate Risk Management Working Group** is established to carry out the duties in relation to the climate risk management functions. The working group consists of several departments (including Marketing, Credit, Human Resources & Administration, Compliance, Finance & Accounting and Risk Management) and is responsible for identifying and assessing climate-related risk and opportunities, discussing goals and strategy and reviewing annual climate risk disclosure report. The working group reports to the Managing Director for support and recommendation to the Board for approval.

### 3.2 Internal guideline and policy

To address the impact of climate change on the Bank, OAL has updated the Risk Appetite Framework and established the Terms of Reference of Climate Risk Management Working Group in 2023, which provide guidance to OAL's climate risk management. OAL is working on updating the relevant Credit Policy to further improve work on climate risk management of the Bank.

### 3.3 Summary of key issues and initiatives

We will gradually integrate climate change issues into the current governance structure.

The following key issues and initiatives have been reported to the Board in the December 2022 and March 2023 board meeting:

- OAL embraces the ORIX Group’s Sustainability Policy with reference to the environmental aspect addressing climate change: e.g., avoiding exposure to high emission industry, and promoting the reduction of environmental footprint in our own operation.
- OAL’s approach to identification of transition risk and physical risk of our asset portfolio and the first Climate Risk Stress Testing results.

## 4. Strategy

### 4.1 Risk identification process

We have defined three time horizons – short term (within one year), medium (2 – 5 years) and long term (over 5 years) - in the process of risk identification. We have also considered the following transition and physical risk in our risk identification process.

Risk Type	Sub-Type	Climate-related risk description	Time Horizon affected
Transition Risk	Policy	<ul style="list-style-type: none"> <li>▪ The HKSAR government has adopted more aggressive policies to meet its pledged emission reduction targets and the use of subsidies and other means to develop carbon-reducing or low-carbon industries.</li> <li>▪ Customers in low-carbon sectors may gain, while customers in high-carbon sectors may experience a deterioration in profitability and solvency due to a significant increase in the price of carbon and operating costs.</li> </ul>	Medium term
	Technology	<ul style="list-style-type: none"> <li>▪ Technology change relating to energy-saving, low-carbon transportation, and increasing use of non-fossil fuels or other technologies that help reduce GHG emissions are needed to meet policy goals.</li> </ul>	Medium - Long term

		<ul style="list-style-type: none"> <li>The new low-carbon industries and low-carbon technologies are rapidly maturing, and quickly occupying most of the market share, while the market share of traditional high-carbon emission industries has declined significantly, with deteriorated profitability, and declined solvency.</li> </ul>	
	Market	<ul style="list-style-type: none"> <li>Increased production costs due to changing input prices may lead to narrowing profit margin and hence repayment ability of our customers.</li> </ul>	Medium – Long term
	Regulatory	<ul style="list-style-type: none"> <li>Banks are required to meet regulatory requirements of managing climate change and climate-related financial disclosure. We should ensure sufficient resources are allocated to implement the relevant framework.</li> </ul>	Short - Medium term
	Reputation	<ul style="list-style-type: none"> <li>Lack of climate and environmental awareness in conducting business activities may adversely affect the company’s ability to maintain or establish business relationships.</li> </ul>	Medium – Long term
Physical Risk	Acute	<ul style="list-style-type: none"> <li>The bank’s real estate collateral in areas prone to impact from acute weather conditions such as typhoons and flooding will decrease in value.</li> </ul>	Medium - Long term
	Chronic	<ul style="list-style-type: none"> <li>Long term climate change (e.g. Rising mean temperatures and sea level) resulting in decreasing the expected value of some climate sensitive assets and business of certain industries.</li> </ul>	Long term

Considering the exposure characteristics of OAL where loans, including vehicle loans, equipment loans and mortgages loans, are regarded as the primary composition of the portfolio, credit risk is assessed to be the most material risk to OAL. We expect to focus on the short- and medium-term strategies in view of the product nature and loan tenor of our current lending portfolio in vehicle finance and commercial finance. Associated opportunities identified include the increasing demand for EV cars, as vehicle financing is one of the primary compositions in OAL’s current portfolio. We are still at an exploration stage for climate-related opportunities and is closely observing the market trend.

**4.2 Scenario analysis**

During the year of 2022, we developed our stress testing and scenario analysis models and related workflows, analyzed the impact of physical risk and transition risk for credit risk. We also performed stress testing and scenario analysis on asset portfolio as of 30 September 2022 with climate risk sensitivity to assess the impact of climate scenarios on the Banks' earnings and capital levels, incorporating conventional risk analysis tools where appropriate.

The methodology and assumptions we adopt are in line with the requirements of module GS-1 "Climate Risk Management" and IC-5 "Stress Testing" of the Hong Kong Monetary Authority's Supervisory Policy Manual.

## **4.2.1 Transition Risk**

### Scenario selection

The transition risk scenario has been formulated based on the 2°C with a delayed transition scenario developed by the Network of Central Banks and Supervisors for Greening the Financial System (“NGFS”). Due to the inadequate internal data, the transmission of transition risk into credit risk is assessed by applying sectorial logit Probability of Default (“PD”) to conduct stress testing. Only the high transition risk sectors (including transportation, construction, capital goods, real estate, and chemicals) of the loan portfolio are evaluated. Year 2021 is taken as the base year, and the scenario from 2022 to 2035 is used for scenario analysis.

### Methodology

Bottom-up climate scenario analysis is conducted on the samples, where the climate scenario is translated into key financials at the obligor level. The key financials include unit price growth, unit cost growth, volume growth and capital expenditure growth. Financial statement analysis further translates the stress on key financials onto the financial statements, then the stressed financial statements are leveraged to evaluate the stressed ratings for assessing the financial impact under the scenario in which the borrowers’ repayment ability is weakened. The average notch-down, stressed rating and stressed PD of each sector can be calculated based on the fluctuations of credit ratings. The potential impact on ECL is estimated by applying model logic implemented in the Bank’s business-as-usual (“BAU”) ECL model.

### Initial insights from scenario analysis

Transition risk stress testing was subsequently performed on climate-related exposures within the Bank’s loan portfolio under the disorderly transition scenario. The results indicated that the Bank’s exposure towards transition risk is moderate, and any potential impact on the Bank’s credit risk is deemed controllable. Going forward, OAL will start engaging with our customers to better understand how they are approaching and preparing for climate risk which help building up the data for us to progress our climate risk management.

## **4.2.2 Physical Risk**

### Scenario selection

The physical risk scenario is based on the Representative Concentration Pathway (“RCP”) 8.5 adopted by the Intergovernmental Panel on Climate Change (“IPCC”). The transmission of physical risk into credit

risk is assessed by the impact of LGD of real estate collateral loans located in Hong Kong and Japan. Considering that the middle of the 21<sup>st</sup> century is used as the time horizon in the HKMA pilot CRST exercise, key intervals of 2050 and 2060 are chosen for the analysis.

### Methodology

The physical risk scenario analysis is conducted at counterparty level. By extracting Value at Risk (“VaR”) data for baseline and scenario years from the XDI tool, the collateral value is stressed according to the change in VaR. Potential impact on ECL is then estimated with the change in collateral value.

### Initial insights from scenario analysis

Physical risk stress testing was conducted based on the RCP 8.5 scenario to evaluate the physical risk associated with climate change on the Bank’s loan portfolio. The Bank’s exposure towards physical risk is assessed as low and the relevant impact on the Bank’s credit risk is considered immaterial.

## **5. Risk Management**

In 2023, climate risk has been newly added to OAL’s Risk Appetite Statement to ensure the risk is appropriately identified and assessed. As a subsidiary of ORIX Corporation, we will embrace the Group’s identified material issues and key goals to reduce climate change-related risks as addressed in the Group’s Sustainability Policy with reference to the environmental aspect in addressing climate change where applicable to our local business.

### **5.1 Integrating climate risk into overall risk management**

#### **5.1.1 Three lines of defence**

The roles and responsibilities of managing climate-related risks allocated among three lines of defence are described below:

- First line of defence is provided by the business units when conducting climate-related risk assessments during client on-boarding, credit application and credit review process. Marketing and Credit officers should have awareness and understanding to identify and assess potential climate-related risks.



- Second line of defence is provided by independent Risk Management and Compliance functions. They undertake independent monitoring including challenging the assessment conducted by the frontline, and monitoring compliance with applicable regulations and internal policies.
- Third line of defence is provided by Internal Audit which is responsible for periodic audit review on the effectiveness of OAL's climate-related risk management.

### **5.1.2 Climate risk management**

We have identified transmission pathways from climate risk to traditional financial risks, based on which we aim to gradually embed the consideration of climate-related risks throughout our risk management framework to ensure comprehensive consideration across our business activities.

Credit risk is assessed to be the most material risk to OAL, transmitted via transition risk which may reduce our borrowing customer's repayment ability as they adjust towards a low-carbon economy, as well as physical risks (such as extreme weather events including typhoons and floods) which may result in a reduction in the value of the collaterals.

OAL refer to our parent company – ORIX Corporation's Sustainability Policy regarding reducing climate-change related risks and avoid exposure to those industry segments<sup>1</sup> identified as having high environmental impact. As regards other high emission sectors in which OAL is exposed to (e.g., transportation and construction segments), OAL is planning to engage our customers to collect climate data which will provide information to enhance our climate risk assessment during client on-boarding and credit review process. Initially, we target to focus on the high emitting sectors and those with the largest exposure first and use the information to help understand risk exposure at a customer and an industry level. Going forward, we aim to embed climate-related considerations into relevant business and credit policies to ensure necessary guidance is provided to our colleagues to support their client engagement.

In supporting an environmentally friendly operation, we strive to become a more energy efficient company by paying more attention to the use of electricity and paper. Even though OAL's Scope 1, 2 emission is not material relevant to the ORIX group, we aim to implement a resource saving plan as we gather further feedbacks from various departments. We will consider the appropriateness of setting metrics as our capabilities evolve.

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<sup>1</sup> Refers to fossil fuel mining, palm oil plantations, and forestry

## 5.2 Climate risk exposure

To better understand our exposure to climate risk, we identified two high carbon /high climate risk sectors, namely transportation sector and construction sector. Within our assets held as collateral for our loan portfolio, the proportion of real estate located in Hong Kong and Japan in the Bank’s total exposure is considered as low.

Organizational level	Risk consideration	Exposures	Risk indicators	Environmental indicators
Sector level	Credit risk – transition risk transmitted into credit risk	Transportation sector	Proportion of the sector’s exposure in the loan portfolio is considered moderate based on the transition risk scenario analysis	Carbon emission
Sector level	Credit risk – transition risk transmitted into credit risk	Construction sector	Proportion of the sector’s exposure in the loan portfolio is considered low based on the transition risk scenario analysis	Carbon emission
Counterparty level	Credit risk – physical risk transmitted into credit risk	Real estate collateral located in Hong Kong and Japan	Proportion of the exposure in the total EAD is considered low based on the physical risk scenario analysis	Sea level rise leading to flooding

## 5.3 Measures to control and mitigate climate-related risk

OAL is at the beginning of our journey to enhance our response to climate-related issues. We aim to improve our ability to identify climate risks and integrate them into our risk management and broader business strategy.

# 6. Metrics and Targets

## 6.1 Overview of metrics and targets

As we embrace the Group’s environmental policy in addressing climate change, we aim to mitigate the impact of climate change on our operations and support the transition to a low-carbon economy. We aim to implement a resource saving plan as we gather further feedbacks from various departments on energy and paper usage and will consider the appropriateness of setting metrics as our capabilities evolve.

## 6.2 GHG Emissions

As a wholly owned subsidiary of ORIX Corp., we have been providing our GHG emission data to headquarter for the purpose of group consolidated disclosure of Scope 1 and 2 emissions. For the FY 31 March 2022, the GHG emission of OAL for gasoline and electricity consumption was 165 tCO<sub>2</sub>.

	FYE 31 March 2021	FYE 31 March 2022
Scope 1 (Direct Emissions)	6	6
Scope 2 (Indirect Emissions)	136	158
<b>Scope 1&amp;2 total</b>	<b>142</b>	<b>165</b>

The calculation method of ORIX Group's GHG emissions is as follows:

- 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”.
- Emission factor adopted for calculation of gasoline for all subsidiaries, including OAL, is provided by Japanese Ministry of Environment according to Japan's Mandatory Greenhouse Gas Accounting and Reporting System.
- Calculation method for emissions related to electricity consumption is market-based, and for emissions factors related to electricity consumption at overseas offices, the International Energy Agency's CO<sub>2</sub> emissions factors from electricity generation by country are used. For OAL, Hong Kong's emission factor is used.

ORIX Group have received third party assurance for the GHG emissions data for overseas subsidiaries since FYE 31 March 2021.

## 6.3 Assurance

The Climate Risk Management Working Group is responsible to overseeing the content of the report. This report has been reviewed by Internal Audit Department and approved by the Managing Director of OAL.