

# NAIC CLIMATE RISK DISCLOSURE SURVEY 2024

## TOKIO MARINE AMERICA INSURANCE COMPANY

### SURVEY QUESTIONS

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#### **Governance**

*1. Disclose the insurer's governance around climate-related risks and opportunities.*

*In disclosing the insurer's governance around climate-related risks and opportunities insurers should consider including the following:*

- Identify and include any publicly stated goals on climate-related risks and opportunities.
- Describe where climate-related disclosure is handled within the insurer's structure, e.g., at a group level, entity level, or a combination. If handled at the group level, describe what activities are undertaken at the company level.
- A. *Describe the board and/or committee responsible for the oversight of climate-related risks and opportunities.*

*In describing the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks, insurers should consider including the following:*

- Describe the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks.
- B. *Describe management's role in assessing and managing climate-related risks and opportunities.*

Various initiatives related to climate action are reported to the Board of Directors after the execution level discussions held at the Sustainability Committee and Management Meetings. In Tokio Marine Holding' (TMHD) governance structure, each relevant execution body voluntarily promotes initiatives under the supervision of the Board of Directors. Key related bodies and their roles are as follows.

#### **Supervisory and Execution Structure for Responding to Climate Change [Board of Directors]**

The Board of Directors recognizes responding to climate change as a material management issue and assumes the role of supervising TMHD entire sustainability promotion scheme. The Board deliberates the Group's sustainability policies encompassing climate action, as well as evaluates and determines mid-term and single-year plans. In monitoring the implementation status of sustainability initiatives, it receives reports from the Sustainability Committee every quarter in principle and provides instructions as necessary. In addition, the Board of Directors holds deliberation on corporate strategy on the themes of the management environment and management issues, including climate action, to fully utilize the knowledge of outside directors and outside Audit & Supervisory Board members.

In fiscal 2023, the Board met four times to deliberate on and receive reports about climate action

and other sustainability activities as below.

Date	Items deliberated and reported
May 2023	Group's sustainability-related initiatives in fiscal 2022 and the annual plan for fiscal 2023
Oct. 2023 Nov. 2023	Progress in the Group's annual sustainability plan for fiscal 2023
Mar. 2024	Progress in the Group's annual sustainability plan for fiscal 2023 (second half)

#### **[Group Chief Sustainability Officer (CSUO)]**

TMHD established the new position of CSUO in April 2021 to accelerate the promotion of sustainability strategy, including climate action, across the entire Group. The CSUO oversees the promotion and permeation of the sustainability strategy, presents related policies to the Board of Directors and the Management Meeting for discussion and takes the role of reporting the progress to these bodies.

#### **[Sustainability Committee]**

TMHD established the Sustainability Committee in April 2021 to accelerate our sustainability strategy, including climate action, across the entire Group. Chaired by the CSUO and comprising such members as the CEO, chief officers and management of overseas Group companies, the Sustainability Committee deliberates on details of our sustainability initiatives and policies on a global basis and monitors the progress of each initiative. The committee met four times in fiscal 2023 to promote and execute the sustainability strategy, formulate medium- to long-term targets (KPIs) related to sustainability, formulate, and review annual plans and deliberate on other items.

#### **[Division Dedicated to Promoting Sustainability]**

TMHD has a division dedicated to the promotion of the Group's sustainability including climate action (Sustainability Division, Corporate Planning Department), which is responsible for operating the Sustainability Committee and consistently promotes the Group's sustainability initiatives while communicating relevant strategies to Group companies, sharing information and undertaking education and support activities.

#### **Compensation System for Directors and Executive Officers**

In fiscal 2022, TMHD started incorporating non-financial indicators concerning the tasks on climate action and other key issues in our sustainability strategy into the performance-linked compensation for Directors and Executive Officers. TMHD uses the progress of each task toward our vision as an indicator, and after performing the first assessment of compensation amounts at the Sustainability Committee, hold a deliberation and give a final decision at the Compensation Committee.

*Tokio Marine Holdings, Inc. TCFD Report 2024 p6*

#### **Climate-related Risk Governance at the US Entity Level**

TMHD employs a federated model in managing its subsidiaries. As such, the governance of climate-related risks and opportunities reflects a combination of both TMHD and GC activity. Tokio Marine America Insurance Company (TMAIC) is the lead company of Tokio Marine America (TMA), which in turn is a subsidiary of Tokio Marine North America (TMNA). Governance of

climate related risk is managed through the Enterprise Risk Management function at TMNA.

TMNA's Chief Financial Officer (CFO) was designated as the TMNA board member responsible for climate risk oversight at the June 2022 TMNA Board of Directors' meeting. The CFO is a member of the TMNA ESG Committee, where Climate Change Risk is a standing agenda item each quarter. TMNA's Chief Risk Officer (CRO) is the chair of the TMNA ESG Committee and senior management representative for climate risk oversight.

The TMA ESG Committee reports through to the TMNA ESG Committee. TMA climate-related risks and opportunities are addressed at the quarterly TMA ESG Committee meetings, with topics including renewable energy, green buildings, and disaster resilience.

Both the TMNA board of directors and TMA board of directors receive quarterly updates on ESG, which includes discussion of climate-related risks and opportunities.

### **Strategy**

2. *Disclose the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy, and financial planning where such information is material.*

*In disclosing the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy and financial planning, insurers should consider including the following:*

- Describe the steps the insurer has taken to engage key constituencies on the topic of climate risk and resiliency.\*<sup>i</sup>
- Describe the insurer's plan to assess, reduce, or mitigate its greenhouse gas emissions in its operations or organizations.\*
  - A. *Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term.*

*In describing the climate-related risks and opportunities the insurer has identified over the short, medium, and longer term, insurers should consider including the following:*

- Define short, medium, and long-term, if different than 1-5 years as short term, 5-10 years as medium term, and 10-30 years as long term.
- B. *Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning.*

*In describing the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning, insurers should consider including the following:*

- Discuss if and how the insurer provides products or services to support the transition to a low carbon economy or helps customers adapt to climate-related risk.
- Discuss if and how the insurer makes investments to support the transition to a low carbon economy.
- C. *Describe the resilience of the insurer's strategy, taking into consideration different climate-related scenarios, including a 2 degree Celsius or lower scenario.*

In responding to climate change, which poses a global social issue critical to human history and important for Tokio Marine Group, our Group promote initiatives toward achieving carbon neutrality by 2050 in keeping with the promise of the Sustainable Development Goals (SDGs) of leaving no one behind and based on constructive dialogue (engagement) with all of our stakeholders. As an insurance business operator (insurance products and services), institutional investor and asset manager, Tokio Marine Group provide support both in terms of mitigating and adapting to climate change and help customers and investment and financing recipients solve their respective issues. Efforts include providing insurance products and services to support the transition to a decarbonized society, such as those promoting the more widespread use of renewable energy; providing insurance to cover damages caused by natural disasters; services that will lead to prevention or reduction of damages; and undertaking sustainable investment and financing.

As a global company, Tokio Marine Group also take climate action through collaboration and cooperation with international and other organizations. Tokio Marine Group intend to contribute to the mitigation and adaptation to climate change and seek growth together with our stakeholders. Social contribution activities are also key to climate action. As such activities, Tokio Marine Group plant mangroves and engage in research and educational activities to increase society's resilience, thereby contributing to climate action as a good corporate citizen in local communities.

### **Recognition of Risks and Opportunities**

In a strategy, recognizing inherent risks is essential. Tokio Marine Group assumes a rise in climate-related risks and accordingly identifies and evaluates their impact on our business. Climate-related risks include physical risks and transition risks. Physical risks arise from an increase in the frequency and intensity of natural disasters caused by climate change, while transition risks result from the impacts of the transition to a decarbonized society on the corporate value of investee companies and assets held by us. On the other hand, initiatives to mitigate and adapt to climate change also provide business opportunities for Tokio Marine Group. In the table below, we show examples of events for each risk and opportunity based on the TCFD recommendations and examples of risks and opportunities to the Group's business activities.

#### **Examples of Events – Physical Risks**

- Acute – Potential for growing frequency and scale of typhoons, floods, and other weather events.
- Chronic – Rising temperatures. Other weather changes, such as droughts and heat waves. Rising sea level rise. Impact on arthropod-borne infectious diseases

#### **Examples of Events – Transition Risks**

- Policies & Regulations – Increase in carbon prices. Strengthening of environmental-related regulations and standards. Increase in climate-related legislation.
- Technology – Technological innovation toward the transition to a decarbonized society.
- Market – Changes in the demand for and supply of products & services.
- Reputation – Changing customer and societal awareness of initiatives surrounding the

transition to a decarbonized society.

#### Examples of Events – Opportunities

- Resource efficiency, energy sources, products and services, markets, and resilience – Demand for products and services aligned with changes in energy sources and designed to increase resilience, changes in public awareness

#### Examples of Risk to the Group's business Activities

- Decrease in insurance profits resulting from an increase in claim payments and a rise in reinsurance premiums
- Impact on business continuity caused by damage to buildings and other facilities at bases
- Decrease in the corporate value of portfolio companies and the value of Company assets due to higher carbon prices
- Impact on Liability insurance payments
- Decreases in the corporate value of portfolio companies that have missed the transition to a decarbonized society and in the value of assets held by the company.
- Decline in revenue due to technological innovation and inability to ascertain changes in customer needs.
- Reputational damage due to the Company's efforts being deemed inappropriate.
- Increase in opportunity to gain insurance profits and for investment and financing on the back of companies' increasing funding needs associated with response to decarbonized society and improvement of resilience

*Tokio Marine Holdings, Inc. TCFD Report 2024 p10*

#### **Policies Concerning Insurance Underwriting as well as Investment and Financing**

Tokio Marine Group's basic policy on climate change is to support the decarbonization of customers and local communities through insurance products and services as well as investments and financing while basing our activities on constructive dialogue with stakeholders. For investment and financing fields that could cause significant, negative impacts on the environment or society, Tokio Marine Group individually set up a policy on each transaction.

At the end of September 2020, Tokio Marine Group published our thoughts on climate change in "Tokio Marine: Our Climate Strategy," which we revised at the end of September 2021 and the end of September 2022. The following sections describe our policies concerning insurance underwriting as well as investment and financing to achieve the goals of the Paris Agreement.

#### **【Insurance Underwriting】**

Tokio Marine Group has not provided new insurance underwriting capacities to coal-fired power generation projects since September 2020 or thermal coal mining projects since September 2021, regardless of whether they are newly constructed or not. However, Tokio Marine Group may grant exceptions for projects with innovative technologies and approaches, such as CCS/CCUS<sup>\*1</sup> and mixed combustion, aiming to achieve the goals of the Paris Agreement, after careful consideration.

Since September 2022, Tokio Marine Group has also strengthened its commitment by protecting

the environment and supporting the transition to a decarbonized society by no longer providing new insurance underwriting capacities to oil and gas company extraction projects<sup>\*2</sup> in the Arctic Circle (all areas north of latitude 66°33, including the Arctic National Wildlife Refuge, ANWR) and oil sands mining.

\*1 Carbon dioxide capture and storage/Carbon dioxide capture, utilization, and storage

\*2 Exemptions for projects with decarbonization plans that are aligned with the Paris Agreement

### **【Investment and Financing】**

With respect to investment and financing, Tokio Marine Group will not provide new financing for coal-fired power generation projects or thermal coal mining projects. However, as with our insurance underwriting policy, Tokio Marine Group may grant exceptions for projects with innovative technologies and approaches, such as CCS/CCUS and mixed combustion, aiming to achieve the goals of the Paris Agreement, after careful consideration.

In aligning with our insurance underwriting policy, Tokio Marine Group also no longer provide new financing for oil and gas extraction projects in the Arctic Circle (all areas north of latitude 66°33, including the ANWR) and oil sands mining and are stepping up our efforts to support the protection of the natural environment and transition to a decarbonized society.

### **【Underwriting Management Process】**

Tokio Marine Group has established a strict underwriting management process for specific sectors that we deem to pose a high risk to the environment and society. For projects that relate to any of the specific sectors but may be subject to special consideration<sup>\*3</sup>, we determine whether to underwrite insurance by using an escalation process, through which a dedicated team will perform risk assessments. We seek the approval of the Sustainability Committee if necessary.

In fiscal 2023, we received inquiries for four projects in the specific sectors. Of these, three were deemed eligible and underwent an assessment by the dedicated team.

\*3 Projects with innovative technologies and approaches, such as CCS/CCUS and mixed combustion which contribute to achieving the goals set in the Paris Agreement, and projects conducted by companies with decarbonization plans aligned with the Paris Agreement will be carefully decided after analyzing their ESG risks.

*Tokio Marine Holdings, Inc. TCFD Report 2024 p33*

## **Strategies to address Climate Change at the US entity level**

TMA has initiated steps to address climate change risk with its clients. TMA loss control engineers consult with clients on disaster resiliency including building design, green materials, supply chain management and business continuity planning. As customers transition their operations to mitigate climate change, TMA engineers consult on safety practices surrounding changes in manufacturing and storage operations such as electric batteries.

Short-term opportunities to address climate-related risks include offering products and services to support the transition to a decarbonized society. Short-term climate-related risks include potential regulatory changes and accurately understanding new technologies, assessing risk and developing policies and practices to mitigate loss. Over the medium to long term, an intensification of natural disasters is predicted. This presents TMA with portfolio management and pricing risks, as traditional modeling and pricing techniques are primarily based on historical data.

TMA's climate strategy includes offering products to companies that contribute to renewable energy development and providing services that assist customers in mitigating risks. This enables TMA to retain customers as they transition their operations, as well as grow business through new markets, products and services. This includes opportunities arising from:

- The construction of new plants to support technology changes (e.g. electric batteries) and an increased demand for green buildings.
- Expanding TMA writings, solely or in partnership with other Group companies, to support renewable energy power generation companies.
- Development of new pre and post loss services for both loss prevention and risk mitigation.

TMA's investment risk policy states the following regarding ESG including climate change risk:

- The Company shall not make loans to finance any of the following types of projects: (i) coal-fired power generation, (ii) thermal coal mining, (iii) oil sands mining, or (iv) oil and gas mining in the Arctic region.
- The Company shall not make loans to, nor other investments in, any company that is named in the list of inhumane weapons manufacturers, or other list of companies in which investments are prohibited, as issued and updated by Tokio Marine Holdings, Inc. from time to time.

## **Risk Management**

### *3. Disclose how the insurer identifies, assesses, and manages climate-related risks.*

*In disclosing how the insurer identifies, assesses, and manages climate-related risks, insurers should consider including the following:*

- Describe how the insurer considers the impact of climate related risks on its underwriting portfolio, and how the company is managing its underwriting exposure with respect to physical, transition and liability risk.\*
- Describe any steps the insurer has taken to encourage policyholders to manage their potential physical and transition climate related risks, if applicable.\*
- Describe how the insurer has considered the impact of climate-related risks on its investment portfolio, including what investment classes have been considered.\*
  - A. Describe the insurers' processes for identifying and assessing climate-related risks.*

*In describing the insurers' processes for identifying and assessing climate-related risks, insurers should consider including the following:*

- Discuss whether the process includes an assessment of financial implications and how frequently the process is completed.\*
  - B. Describe the insurer's processes for managing climate-related risks.*
  - C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management.*

*In describing how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management, insurers should consider including the following:*

- Discuss whether climate-related risks are addressed through the insurer's general enterprise-risk management process or a separate process and how frequently the process is completed.
- Discuss the climate scenarios utilized by the insurer to analyze its underwriting risks, including which risk factors the scenarios consider, what types of scenarios are used, and what timeframes are considered.
- Discuss the climate scenarios utilized by the insurer to analyze risks on its investments, including which risk factors are utilized, what types of scenarios are used, and what timeframes are considered.

## **Managing Climate-Related Risk Based on Enterprise Risk Management (ERM)**

TMHD conducts enterprise risk management (ERM), which includes the management of climate risks. Through the ERM cycle, TMHD comprehensively identifies and assesses risks, using both qualitative and quantitative approaches.

In the insurance underwriting business, which pursues profit through risk-taking, risk assessment is the foundation of the Group's business. TMHD has been working for many years to assess material risks (including those due to natural disasters) both quantitatively and qualitatively. Specific



initiatives are as follows.

(1) Qualitative Risk Management

TMHD identify all forms of risks comprehensively, including those for natural disasters such as large wind/flood and emerging risks due to environmental changes. Of these risks, TMHD define risks that will have an extremely large impact on Group's financial soundness and business continuity as "material risks." TMHD include the wind/flood risks (including climate change physical risks) in the "material risks" category, which could become more frequent and severe due to the effects of climate change. For these material risks, TMHD also formulate control measures prior to risk emergence and response measures for after risks occur.

(2) Quantitative Risk Management

For material risks, through measuring risk amounts and implementing stress tests as part of the TMHD's quantitative risk management, TMHD performs a multifaceted review of the adequacy of capital relative to the risks held for the purpose of maintaining ratings and preventing bankruptcy.

TMHD calculates risk amounts posed by natural disasters using a risk model (for Japan, a risk model developed in-house based on engineering theory and the latest knowledge of natural disasters, and for overseas, models provided by outside vendors). TMHD independently analyzes past tropical cyclones (typhoons in Japan and hurricanes in the United States), torrential rains, and other changing trends and incorporate this data as necessary in order to properly assess current weather phenomena.

Furthermore, within material risks, TMHD conducts stress tests based on scenarios in which extreme economic losses are expected and scenarios where multiple material risks occur at the same time. As for risks involving major wind and flood disasters, for example, TMHD assumes these scenarios to be on a much larger scale than the major typhoons that hit the Greater Tokyo Area in 2018 and 2019 causing extensive damages. TMHD updates scenarios continuously while taking into account stress tests released by regulatory authorities of every country, the latest knowledge (including that of climate change), and recent case studies.

**Appropriately Control Risk through Risk Diversification and Reinsurance, etc.**

Natural disasters are inevitable in Japan, the Group's home market. For that reason, TMHD has sought to control risk capital by geographic, business, and product risk diversification through M&A overseas.

In addition, reinsurance, as a hedge against risk, is also an effective way to protect the Group's capital and stabilize profits. The Group utilizes reinsurance to prepare for natural disasters (capital events) that occur once every few centuries, and TMHD determines earnings coverage from the standpoint of economic rationality and take necessary measures.

**Acquisition of Knowledge (e.g., Industry-Academia Collaboration)**

TMHD is deepening collaboration with both inside and outside experts to acquire knowledge about risks. Tokio Marine Research Institute collaborates with The University of Tokyo, Nagoya University, and Kyoto University, among others, to carry out impact analysis based on the possibility for increased insurance losses associated with natural disasters that are becoming more severe in nature.

Moreover, Tokio Marine dR and a team of experts in natural disasters working in Atlanta, the United States, are leading efforts to upgrade natural disaster risk management across the entire Group, including various evaluations of natural disaster risk models.

*Tokio Marine Holdings, Inc. TCFD Report 2024 p38*

## **Enterprise Risk Management (ERM) at the US Entity Level**

The ERM cycle at the US entity level dovetails with the process disclosed for TMHD. The evaluation of key risks such as climate change is outlined in TMNA's Risk Management Policy. From a qualitative risk viewpoint, Emerging Risks are defined as newly developing or changing risks or risks already known or managed, but whose magnitude on the organization is growing in unexpected ways. Once identified, Emerging Risks are included in the Emerging Risk Inventory for further exploration. Climate Change Risk is part of the current Emerging Risk Inventory and discussed frequently with stakeholders throughout the TMNA GCs, as well as quarterly in the TMNA and TMA ESG Committee meetings. Climate Change Risk has been elevated into a category for deeper evaluation and formal inclusion into the TMNA quantified economic capital assessment.

From a quantitative risk viewpoint, Underwriting Risk contributes a significant amount of risk to TMNA's required overall economic capital. As a subset of Underwriting Risk, Natural Catastrophe Risk is evaluated quarterly by the TMNA ERM function for TMA. External models (Risk Management Solutions, Inc. (RMS) and AIR Verisk) are used in conjunction with internal capital modeling to evaluate natural catastrophe exposure including earthquakes, floods, wildfires, hurricanes and convective storms (tornado, hail and straight line winds). For capital modeling, risk is quantified using the 99% Tail Value at Risk (TVaR) metric.

TMNA performs annual stress tests as part of its ORSA, which includes a multi-factor stress scenario designed to test resiliency of the organization to deteriorating underwriting performance and heightened natural catastrophe losses. For the 2023 ORSA, TMNA also performed an independent evaluation of both the PRA 2019 US Hurricane Scenarios A and B and the Bank of England's 2021 Climate Biennial Exploratory Scenario for purposes of evaluating the impact of climate change risk in comparison to the aforementioned stress scenario. TMNA leveraged analyses performed by TMHD's Risk Management Department (RMD) for these scenarios on TMA specific exposure. Based on this review, TMNA concluded that the existing stress scenario reasonably contemplated the impact of increased physical risks associated with climate change over the planning period.

The TMA underwriting and pricing process addresses both physical and transition risks supported by loss control engineering visits and catastrophe modeling. Building characteristics, building code effectiveness, inflation and supply chain management are incorporated into the underwriting process. Key processes at TMA for managing climate-related risks include:

- Optimizing the TMA portfolio. Specifically, TMA revised its underwriting policy to support reduced GHG emissions through the prohibition of coal fired power plants and oil mining while focusing on renewable power generation companies.
- Risk diversification
- Further strengthening TMA business and ERM platforms to respond to increasingly diverse and complex risks such as those created by more severe natural disasters.

## **Metrics and Targets**

4. *Disclose the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material.*

*In disclosing the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material, insurers should consider including the following:*

- Discuss how the insurer uses catastrophe modeling to manage the climate-related risks to your business. Please specify for which climate-related risks the insurer uses catastrophe models to assess, if any.
- A. *Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process.*

*In disclosing the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process, insurers should consider including the following:*

- In describing the metrics used by the insurer to assess and monitor climate risks, consider the amount of exposure to business lines, sectors, and geographies vulnerable to climate-related physical risks [answer in absolute amounts and percentages if possible], alignment with climate scenarios, [1 in 100 years probable maximum loss, Climate VaR, carbon intensity], and the amount of financed or underwritten carbon emissions)
- B. *Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.*
- C. *Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.*

## **Metrics and Targets**

### **[Metrics and Targets for Fiscal 2050]**

#### ● **Reduction of GHG emissions**

Aiming to reduce GHG (CO<sub>2</sub>) emissions from Tokio Marine Group to net zero by fiscal 2050 for our own operations (including insurance customers and investment and financing recipients)<sup>\*1,\*2</sup>.

### **[Metrics and Targets for Fiscal 2030]**

#### ● **Reduction of GHG emissions**

Reducing GHG emissions (CO<sub>2</sub>) for operations from Tokio Marine Group by 60% (vs 2015)<sup>\*3</sup>

#### ● **Renewable electricity use**

Using 100% of renewable electricity at Tokio Marine Group's major business facilities

\*1 Medium-term targets still under consideration

\*2 Scope 3, Category 15, based on the GHG Protocol standards

\*3 Associated with our own business activities (Scope 1 [direct emissions] + Scope 2 [indirect emissions] + Scope 3 [other indirect emissions; Categories 1, 3, 5 and 6] based on the GHG Protocol standards)

Scope 3 includes categories of importance to the Group for which numerical values can be obtained.

## GHG Emissions

### [Emissions Associated with the Group's Business Activities and Achieving Carbon Neutrality]

Each Tokio Marine Group company is working to reduce the environmental impact associated with its business activities, and at the same time, aims to achieve carbon neutrality on a global basis, in which the amount of GHG fixed and reduced through mangrove planting and the use of natural energy exceeds GHG (CO<sub>2</sub>) emissions from business activities.

### Achieving Carbon Neutrality in Fiscal 2022

- **Reduction of GHG (CO<sub>2</sub>) emissions from Tokio Marine Group operations<sup>\*1</sup>: 80,201 tons (32% reduction vs 2015)**

(Scope 1: 13,362 tons; Scope 2: 41,190 tons; Scope 3<sup>\*2</sup>: 25,649 tons)

- **Amount of GHG (CO<sub>2</sub>) Fixed and Reduced: 93,000 tons**

Tokio Marine Group is working to reduce the environmental impact of the overall Group (domestic and overseas) and become carbon neutral by 1) conserving energy and using energy more efficiently, 2) planting mangroves to absorb and fix CO<sub>2</sub>, 3) using natural energy (such as by procuring green electricity) and 4) amortizing carbon credits. As a result of these efforts, in fiscal 2022 we achieved carbon neutrality for the tenth consecutive year (since fiscal 2013) thanks to absorption and fixation effects of mangrove planting and the use of carbon credits outperforming the CO<sub>2</sub> emissions generated by the Group's overall business activities. The value of ecosystem services generated through the Mangrove Planting Project from April 1999 to the end of March 2022 has reached approximately 202.4 billion yen. We expect the value to climb to 391.2 billion yen by the end of fiscal 2038<sup>\*3</sup>. As of March 31, 2024, we have planted a total area of 12,567 hectares of mangrove forest.

\*1 Associated with our own business activities (Scope 1 [direct emissions] + Scope 2 [indirect emissions] + Scope 3 [other indirect emissions; Categories 1, 3, 5 and 6] based on the GHG Protocol standards)

\*2 Amount of paper used, etc. (Categories 1, 3, 5 and 6)

\*3 Survey contracted out to Mitsubishi Research Institute, Inc. and evaluated following internationally recognized methodologies

*Tokio Marine Holdings, Inc. TCFD Report 2024 p41*

## Measures against Climate Change at US Entity Level

TMNA supports TMHD in attaining its global sustainability goals over the medium to long term. At the GC level, TMA is at the early stages of developing metrics to assess the impact of physical and transition risks associated with climate change.

As noted in response to question 3, catastrophe risk models are used to evaluate potential losses due to

natural catastrophes such as hurricanes. TMHD's multidisciplinary team of data and modeling experts in Natural Catastrophe Risk Research & Development (part of RMD) have performed research to assess the impact of climate change on physical risks affecting natural catastrophes. Specific physical risk impacts evaluated include: 1) increase in frequency of major hurricanes; 2) uniform increase in wind speed of major hurricanes; 3) tropical cyclone-induced flooding; and 4) storm surge/sea level rise. This research has been ongoing since 2020 for the major GCs of TMHD, including TMA. As previously noted, risk is quantified for natural catastrophes using the 99% Tail Value at Risk (TVaR) metric. TMA is coordinating with TMHD to develop additional risk metrics for assessing climate change risk.

For Fiscal YE 2023, TMA Scope 1, Scope 2, and partial Scope 3 emissions CO2 equivalent metric tons (MtCO2e) are shown below:

Scope 1: 151

Scope 2: 238

Scope 3:

Business Travel – 395

Employee Commute – 355

Procurement – 675

TMNA has partnered with an external vendor to verify the completeness and accuracy of TMA's Scope 1 and 2 inventory, as well as derive partial Scope 3 estimates. The inventory was conducted with the best available data to date and is using assumptions approved by the Greenhouse Gas Protocol. Note that REC offsets for TMA's electricity usage are not reflected in estimates presented, and Scope 1 mobile combustion is not included in the inventory due to data limitations.

TMA has partnered with Terrapass since 2014 to purchase renewable energy in the form of wind credits. Terrapass funds projects that destroy greenhouse gases and produce renewable energy, with project funding provided via purchase of carbon offsets.

**Closed-ended questions directly correspond to the narrative above, allowing for explanation and qualification of the yes/no answers. Closed-ended questions are voluntary for reporting year 2023 and individual states may elect not to request them.**

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### **Governance**

- Does the insurer have publicly stated goals on climate-related risks and opportunities? (Y/N) Y
- Does your board have a member, members, a committee, or committees responsible for the oversight of managing the climate-related financial risk? (Y/N) Y
- Does management have a role in assessing climate-related risks and opportunities? (Y/N) Y
- Does management have a role in managing climate-related risks and opportunities? (Y/N) Y

### **Strategy**

- Has the insurer taken steps to engage key constituencies on the topic of climate risk and resiliency? (Y/N) \* Y
- Does the insurer provide products or services to support the transition to a low carbon economy or help customers adapt to climate risk? (Y/N) Y
- Does the insurer make investments to support the transition to a low carbon economy? (Y/N) Y
- Does the insurer have a plan to assess, reduce or mitigate its greenhouse gas emissions in its operations or organizations? (Y/N)\* Y

### **Risk Management**

- Does the insurer have a process for identifying climate-related risks? (Y/N) Y
  - If yes, are climate-related risks addressed through the insurer's general enterprise-risk management process? (Y/N) Y
- Does the insurer have a process for assessing climate-related risks? (Y/N) Y
  - If yes, does the process include an assessment of financial implications? (Y/N) Y
- Does the insurer have a process for managing climate-related risks? (Y/N) Y
- Has the insurer considered the impact of climate-related risks on its underwriting portfolio? (Y/N/Not Applicable)\* Y
- Has the insurer taken steps to encourage policyholders to manage their potential climate-related risks? (Y/N)\* Y
- Has the insurer considered the impact of climate-related risks on its investment portfolio? (Y/N)\* Y
- Has the insurer utilized climate scenarios to analyze their underwriting risk? (Y/N) Y
- Has the insurer utilized climate scenarios to analyze their investment risk? (Y/N) Y

### **Metrics and Targets**

- Does the insurer use catastrophe modeling to manage your climate-related risks? (Y/N) Y
- Does the insurer use metrics to assess and monitor climate-related risks? (Y/N) Y
- Does the insurer have targets to manage climate-related risks and opportunities? (Y/N) Y
- Does the insurer have targets to manage climate-related performance? (Y/N) Y

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<sup>i</sup> \* Asterisks represent questions derived from the original Climate Risk Disclosure Survey.

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<sup>i</sup> \* Asterisks represent questions derived from the original Climate Risk Disclosure Survey.