

# **Tokio Marine's ClimateWise Report Annual Reporting 2018-2019**

**July 2019**

**Tokio Marine & Nichido Fire Insurance Co., Ltd.**



## Table of Contents

PRINCIPLE 1 - BE ACCOUNTABLE.....	3
PRINCIPLE 2 - INCORPORATE CLIMATE-RELATED ISSUES INTO OUR STRATEGIES AND INVESTMENTS.....	6
PRINCIPLE 3 - LEAD IN THE IDENTIFICATION, UNDERSTANDING AND MANAGEMENT OF CLIMATE RISK.....	11
PRINCIPLE 4 - REDUCE THE ENVIRONMENTAL IMPACT OF OUR BUSINESS .....	23
PRINCIPLE 5 - INFORM PUBLIC POLICY MAKING .....	31
PRINCIPLE 6 - SUPPORT CLIMATE AWARENESS AMONGST OUR CUSTOMER/ CLIENTS..	40
PRINCIPLE 7 - ENHANCE REPORTING.....	44

## Brief Introduction of Tokio Marine

**Company Name:** Tokio Marine & Nichido Fire Insurance Co., Ltd. (TMNF)

**Company Overview:** The core property & casualty insurance company headquartered in Tokyo Japan of Tokio Marine Group(or Tokio Group), a global insurance group of full-line insurance companies active in 39 countries and regions worldwide (Asia, the Americas, Middle East and Europe), operating non-life insurance, life insurance, re-insurance, and financial and general businesses. The Group holding company is Tokio Marine Holdings, Inc. (TMHD).

**Reporting Year:** FY2018 (April 1 2018 - March 31 2019)

**Business Category:** B - Insurers

**Reporting content:** Please see below.

**PRINCIPLE 1 - BE ACCOUNTABLE**

<p><b>1.1</b> Ensure that the organisation's Board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.</p>	<p><b>Board of Directors</b> <i>The Board of Directors of Tokio Marine Holdings (TMHD) is reported on the CSR activities of the entire Group while formulating the Overall Group CSR Strategy (medium-term plan and single fiscal-year plans). CSR promotion officers at each group company play leading roles in promoting and handling common CSR issues to be addressed by the entire Group as well as in implementing CSR activities based on the characteristics of each business and local communities.</i></p> <p><i>The Board is the decision-making body for Tokio Marine Group's climate-related action policies. It evaluates and determines the Overall Group CSR Strategy that encompasses climate-related measures, a medium-term plan and plans for each fiscal year. As regards the implementation status of climate-related measures throughout the Group, the Board also monitors matters having significance in terms of management based on the reports from a dedicated CSR promotion department (CSR Division within the Strategy and Synergy Department of TMHD).</i></p> <p><i>The board monitors and oversees results against CSR targets (e.g. CO2 emission reduction target of 1% year to year and Employee's social contribution activity participation ratio which is equal to or greater than 100% in cumulative total for fiscal 2018). The board confirmed that CSR targets for fiscal 2018 were achieved.</i></p> <p><i>The board adopted "Tokio Marine Group's Mid-Term (fiscal 2018-2020) CSR Strategy" in February 2018. This includes the following goals.</i></p> <ul style="list-style-type: none"> <li><i>-Provide customers with products and services which help resolve environmental and social issues</i></li> <li><i>-Continue to achieve a carbon neutral (net-zero emission) status every fiscal year</i></li> <li><i>-Execute proper ESG-related disclosures and promote stakeholder engagements</i></li> </ul> <p><b>The CSR Board</b> <i>The CSR Board, comprising the CEO of Tokio Marine Holdings (Group CEO) and presidents of Group companies, is responsible for executing the climate-related strategies of the entire Group. The CSR Board holds meetings periodically (at least once a year) to evaluate and discuss the Overall Group CSR Strategy that includes climate-related measures, a medium-term plan and plans for each fiscal year, and based on the reports from the CSR Division, monitors the implementation status</i></p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>of climate-related measures throughout the Group.</p> <p><b>Planned Activities</b></p> <p>In fiscal 2019, TMHD’s Board of directors plans to monitor and oversee results in fiscal 2018 and set the targets in fiscal 2019. TMHD also plans to hold the CSR Board to share ESG-related business environment and Tokio Marine Group’s CSR strategy and initiatives.</p> <p>Please see “Climate-Related Governance” on the following link for further information.  <a href="https://www.tokiomarinehd.com/en/sustainability/governance/low_carbon.html">https://www.tokiomarinehd.com/en/sustainability/governance/low_carbon.html</a></p> <p>Please see “CSR Promotion Structure and Materiality and Plans and Results of CSR Initiatives ~Tokio Marine Group’s CSR Promotion Structure” on the following link for further information.  <a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html</a></p>
<p><b>1.2</b> Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.</p>	<p><b>The Group Chief Strategy and Synergy officer</b></p> <p>The Group Chief Strategy and Synergy Officer (Group CSSO) is responsible for overseeing the Business Strategy Department, in which the CSR Division has been established, as well as for handling CSR- and sustainability-related issues of the entire Group and making reports to the Group CEO. The Group CSSO and the CSR Division meet periodically to discuss the ongoing projects. The Group CSSO also monitors climate-related matters based on the reports from the CSR Division, while the CSR Division investigates and provides findings on topics for which the Group CSSO has requested clarification.</p> <p><b>Person Responsible for assessing and managing climate-related issues</b></p> <p>Makoto Okada, Vice President, CSSO is supervising Strategy and Synergy Department, and responsible for assessing and managing climate-related issues of Tokio Marine Group.</p> <p><b>Dedicated Division under the supervision of CSSO</b></p> <p>Tokio Marine Group has a dedicated CSR Division (CSR Division, Strategy and Synergy Department) to work on incorporating the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of Climate risk as part of Board agenda.</p>

**CSR Dialogue -how management is informed about climate-related issues**

TMHD convenes CSR Dialogue inviting external experts. The dialogues give us opportunities to hear outside opinions about our awareness and approaches concerning Group CSR issues. These opinions and other ideas are then reflected in our CSR strategy and our approach to each individual CSR issue.

In fiscal 2018, They made an in-depth discussion with Mr. Hidemitsu Sasaya, CSR/SDGs Consultant experienced in both public and private sectors (Japan's Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment, Ministry of Foreign Affairs, and ITO EN, Ltd.).

[https://www.tokiomarinehd.com/en/sustainability/group\\_csr/engagement.html](https://www.tokiomarinehd.com/en/sustainability/group_csr/engagement.html)

**Planned Activities**

Tokio Marine plans to keep the above management roles in assessing and managing climate-related issues.

**PRINCIPLE 2 - INCORPORATE CLIMATE-RELATED ISSUES INTO OUR STRATEGIES AND INVESTMENTS**

<p><b>2.1</b> Evaluate the implications of climate change for business performance (including investments) and key stakeholders.</p>	<p><b>Implications of climate change</b> <i>Responding to risks associated with “climate change and natural disasters,” one of Tokio Marine Group’s CSR material issues included in this theme, also comprises a major management issue that the global insurance industry must address in the medium to long term. Through industry-academia collaboration with The University of Tokyo, Nagoya University, Kyoto University and Tohoku University, Tokio Marine Group engages in research on climate change and natural disaster risk in an effort to gain deeper scientific insight into disaster prevention and mitigation and to refine the measuring methods through risk modelling to ascertain risk volume in even greater detail. Our efforts in this area include development of a stochastic risk assessment approach. We believe that in addition to providing products and services in developed countries it is also important to disseminate the ideas of an insurance mechanism and risk management practices in developing countries and regions particularly vulnerable to the impact of climate change and natural disasters in accordance with the Sendai Framework for Disaster Risk Reduction 2015-2030, which provides new world guidelines for disaster risk reduction. To this end, we are working to resolve disaster issues and mitigate disaster damage globally by using the outcomes of our industry-academia research to the benefit of society and by taking part in international initiatives, such as the UNDRR Private Sector Alliance for Disaster Resilient Societies (ARISE) and The Geneva Association’s Extreme Events and Climate Risk (EE+CR) Working Group.</i></p>						
<p><b>2.2</b> <b>Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders.</b></p>	<p><b>KEY METRICS</b> <i>Tokio Marine sets key metrics to measure and manage climate-related risks and opportunities.</i></p> <p style="text-align: center;"><b>Climate change and increase in natural disasters</b></p> <table border="1"> <thead> <tr> <th>Core theme</th> <th>Stakeholders</th> <th>Corresponding actions (Materiality)</th> </tr> </thead> <tbody> <tr> <td>Providing Safety and Security</td> <td>Shareholders</td> <td>Research on climate change and natural disasters (Disaster, accidents, microinsurance)</td> </tr> </tbody> </table>	Core theme	Stakeholders	Corresponding actions (Materiality)	Providing Safety and Security	Shareholders	Research on climate change and natural disasters (Disaster, accidents, microinsurance)
Core theme	Stakeholders	Corresponding actions (Materiality)					
Providing Safety and Security	Shareholders	Research on climate change and natural disasters (Disaster, accidents, microinsurance)					



		<i>Employees, Insurance Agents and Business Partners</i>	<i>Insurance products responding to climate change and natural disasters (Disaster, accidents, microinsurance)</i>	
			<i>Instill the necessity of preparation for increasing natural disasters in customers (Consumer education)</i>	
			<i>Respond quickly to claims payments at occurrence of disasters(Grievance resolution (Quality improvement of products and services))</i>	
		<i>Customers</i>	<i>There is a rising need for casualty insurance due to the frequent occurrences of major natural disasters (Disaster, accidents, microinsurance)</i>	
			<i>Businesses that accelerate developing clean energy (Development of clean energy)</i>	
		<i>Local Communities and Societies</i>	<i>Accumulation of information regarding disaster prevention and appropriate action in the case of a disaster (Disaster prevention, traffic accidents)</i>	
			<i>Reduction of environmental footprint through products and services (Global environment protection activities (Biodiversity))</i>	
		<i>Protecting the Earth</i>	<i>Local Communities and Societies</i>	<i>Climate change, natural disasters and depletion of biodiversity Global environment protection activities (Biodiversity) (Environmental protection activities in local communities)</i>
		<i>Governance and Compliance</i>	<i>Shareholders</i>	<i>Response to impact on the insurance business of issues such as the frequent occurrences of major natural disasters and the</i>

		<i>strong resilience to disasters (Enterprise Risk Management, generate and distribute economic value)</i>
	<i>Insurance Agents and Business Partners</i>	<i>Pressure by institutional investors on company climate change strategy over its value chain and the implementation of effective initiatives (Supplier environmental and social assessment)</i>
	<i>Investment</i>	<i>Investment for promoting clean energy and investment for promoting ESG management (Sustainable investment)</i>

**Past-year performance**

Please find “Plans and Results of CSR Initiatives”

[https://www.tokiomarinehd.com/en/sustainability/group\\_csr/maintheme.html](https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html)

You can also find the past-year performances in the past sustainability reports.

<https://www.tokiomarinehd.com/en/sustainability/library/report.html>

**Metrics and targets**

We use CO2 emissions from business activities and the CO2 fixation and reduction effect from mangrove planting and other activities as our metrics. Our target is to achieve carbon neutral status on a Group basis. We will continue toward achieving this target in fiscal 2019 and onward.

**Initiatives Toward Achieving Carbon Neutral**

Mangrove forests have an effect on the prevention and mitigation of global warming by absorbing and fixing a significant volume of CO2. Under the concept of “Insurance for the Future of the Earth,” Tokio Marine Group has engaged in the Mangrove Planting Project since 1999. As of March 2019, 10,790 hectares of mangrove forests have been planted through this project in nine countries in the Asia-Pacific Region, primarily in Asia. Each Group company strives to reduce the environmental footprint through energy and resource conservation. At the same time, Tokio Marine Group aims to achieve a carbon neutral status on a global basis, offsetting the CO2 emissions generated by its business activities with CO2 absorption and fixation through means such as mangrove planting\* and Tradable Green Certificates (wind power).

CO2 emissions from Scope 1+2+3 in fiscal 2018 amounted to 111,509 tons, 96.8%



	<p><i>of emissions in the previous year. On the other hand, the CO2 fixation and reduction effects through mangrove planting and purchasing green energy amounted to 153,335 tons and the entire Tokio Marine Group (domestic and overseas)/TMNF thus achieved a carbon neutral status for six/ten consecutive years respectively.</i></p> <p><i>* The calculations of the amount of CO2 emissions, CO2 absorption and fixation through mangrove planting and CO2 reduction through the purchase of renewable energy have been verified by a third-party organization (Ernst &amp; Young ShinNihon LLC.). (Amounts of CO2 absorption and fixation through mangrove planting are based on evaluations and calculations by the Central Research Institute of Electric Power Industry (CRIEPI).</i></p> <p><b>Methodologies</b></p> <p><i>Methodologies used to calculate the above data are as follows.</i>  <a href="https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr_indicators.pdf">https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr_indicators.pdf</a></p> <p><b>Planned Activities</b></p> <p><i>Tokio Mairne plans to continue the above activities in fiscal 2019.</i></p>
<p><b>2.3 Incorporate the material outcomes of climate risk scenarios into business (and investment) decision making.</b></p>	<p><b>Undertaking scenario analysis</b></p> <p><i>With the aim of forecasting future changes in typhoon risk due to global warming, the Tokio Marine Research Institute has been undertaking joint research on climate risks with The University of Tokyo using an originally developed stochastic typhoon model that estimates future changes in typhoons. More recently, we have also been engaging in research related to forecasts of annual typhoon trends in addition to assessing the impact of global warming on typhoon risk.</i></p> <p><i>The Atmosphere and Ocean Research Institute at The University of Tokyo, our partner in this joint research, has been conducting research into climate change and other climate systems using an integrated analysis of observation data and results of simulations based on climate models. Professor Masahide Kimoto and other researchers have contributed as lead authors to the creation of the IPCC assessment reports, which are a compilation of the latest findings on climate change, and The University of Tokyo has received acclaim from around the world for the widely used research results.</i></p> <p><b>Execution of scenario analysis</b></p> <p><i>Climate change due to global warming is considered to possibly bring about</i></p>

major changes in the frequency and scale of weather disasters in the future. As such, basing analyses only on past statistical data may prevent appropriate risk assessment and significantly impact the calculation of insurance premiums and the ability to pay insurance claims in the event of a serious disaster. Occurrence of water immersion, power failure or other damage resulting from a flood or other natural disasters at any of the bases of Tokio Marine Group may disrupt the Group’s business operations and cause financial impact, including response costs and lower revenues. For this reason, the Tokio Marine Research Institute and other Group companies have been assessing and calculating the impact on insurance losses under future climate conditions, using the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) scenarios. Specifically, RCP4.5 and RCP8.5 are used to simulate changes in typhoon risk, while RCP8.5 is used to simulate changes in flood risk due to increased rainfall.

**Results of scenario analysis**

The results of analyses of such scenarios are referenced in managing risks through the Group-wide Enterprise Risk Management (ERM) system while considering the potential impact on insurance underwriting from more severe natural disasters arising due to climate change. In addition, we strive to make a faster, smoother response to losses after a typhoon or other wide-area disasters by strengthening our support structure in Japan, introducing electronic means to report accidents internally and within each agent and taking other measures to enhance the competitiveness of our claims services.

**Planned Activities**

As a member of the UNEP FI TCFD Insurer Pilot Group, Tokio Marine aims to contribute to a formulation of TCFD-aligned insurers disclosure methodologies through participating in the related discussions with various experts. Tokio Marine will consider sophisticate its TCFD-aligned climate-related disclosures including scenario analysis for it transition risks in line with methodologies which will be developed by the Pilot Group.



**PRINCIPLE 3 - LEAD IN THE IDENTIFICATION, UNDERSTANDING AND MANAGEMENT OF CLIMATE RISK**

**3.1**  
**Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).**

***Climate-Related Governance***

*The Board of Directors of Tokio Marine Holdings is the decision-making body for Tokio Marine Group’s climate-related action policies. It evaluates and determines the Overall Group CSR Strategy that encompasses climate-related measures, a medium-term plan and plans for each fiscal year. As regards the implementation status of climate-related measures throughout the Group, the Board also monitors matters having significance in terms of management based on the reports from a dedicated CSR promotion department (CSR Division within the Strategy and Synergy Department of Tokio Marine Holdings).*

*The CSR Board, comprising the CEO of Tokio Marine Holdings (Group CEO) and presidents of Group companies, is responsible for executing the climate-related strategies of the entire Group. The CSR Board holds meetings periodically to evaluate and discuss the Overall Group CSR Strategy that includes climate-related measures, a medium-term plan and plans for each fiscal year, and based on the reports from the CSR Division, monitors the implementation status of climate-related measures throughout the Group.*

*The Group Chief Strategy and Synergy Officer (Group CSSO) is responsible for overseeing the Business Strategy Department, in which the CSR Division has been established, as well as for handling CSR- and sustainability-related issues of the entire Group and making reports to the Group CEO. The Group CSSO and the CSR Division meet periodically to discuss the ongoing projects. The Group CSSO also monitors climate-related matters based on the reports from the CSR Division, while the CSR Division investigates and provides findings on topics for which the Group CSSO has requested clarification.*

***Climate-Related Strategies***

***Physical Risk:*** *Climate change due to global warming is considered to possibly bring about major changes in the frequency and scale of weather disasters in the future. As such, basing analyses only on past statistical data may prevent appropriate risk assessment and significantly impact the calculation of insurance premiums and the ability to pay insurance claims in the event of a serious disaster. Occurrence of water immersion, power failure or other damage resulting from a flood or other natural disasters at any of the bases of Tokio Marine Group*

may disrupt the Group’s business operations and cause financial impact, including response costs and lower revenues. For this reason, the Tokio Marine Research Institute and other Group companies have been assessing and calculating the impact on insurance losses under future climate conditions, using the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) scenarios. Specifically, RCP4.5 and RCP8.5 are used to simulate changes in typhoon risk, while RCP8.5 is used to simulate changes in flood risk due to increased rainfall. The results of analyses of such scenarios are referenced in managing risks through the Group-wide Enterprise Risk Management (ERM) system while considering the potential impact on insurance underwriting from more severe natural disasters arising due to climate change. In addition, we strive to make a faster, smoother response to losses after a typhoon or other wide-area disasters by strengthening our support structure in Japan, introducing electronic means to report accidents internally and within each agent and taking other measures to enhance the competitiveness of our claims services.

**Transition Risk:** In line with the transition to a low-carbon society, enforcement of more stringent laws and regulations and rapid technological advancement may trigger changes in the Group’s business environment and in customer needs, and possibly affect the way we do business and what products and services we develop and provide. However, we expect that replacement of the existing products and services with low-carbon options will occur gradually, allowing us to implement appropriate risk management and develop and provide adequate accident response services for insurance policies that have a relatively short term, including those renewed annually.

**Opportunities:** In the process of promoting GHG emissions reduction, a shift to “cleaner” modes of power generation may occur and push up needs for insurance for clean energy providers, including solar and geothermal power generation operators. Amid such a change, we have been conducting research to ensure appropriate risk assessment in insurance underwriting and have already developed and been providing insurance products for such clean energy providers as an effort to increase the opportunity to generate more revenues. While using CO2 emissions from business activities and the CO2 fixation and reduction effect from mangrove planting and other activities as our metrics and setting out the target of achieving carbon neutral status, we are strengthening our ability to respond to the transition risk and creating additional opportunities for efficient use of resources and cost reduction.

*Given these climate-related risks and opportunities surrounding Tokio Marine Group, we have specified climate change and natural disasters as issues having CSR materiality (material CSR issues) and have been making various efforts as part of our climate-related strategies. These efforts include: engaging in industry-academia collaborative research on climate change and weather disaster risk, developing and providing disaster risk-related products and services, raising environmental and disaster prevention awareness, reducing the environmental footprint in business activities and achieving carbon neutral status.*

**Risk Management**

*At Tokio Marine Holdings, a dedicated CSR promotion department (CSR Division within the Company’s Strategy and Synergy Department) identifies risks and opportunities, including those related to climate change, and compiles the assessment results of these risks and opportunities for drafting an Overall Group CSR Strategy. The division also holds a monthly meeting with the CSSO, who is a Vice President, to also discuss the assessment results.*

*Tokio Marine Group also identifies and assesses climate-related risks and opportunities by analyzing the feedback from stakeholder engagement. This stakeholder engagement initiative includes “CSR Dialogue,” in which we regularly invite outside experts to share the latest knowledge on CSR with the Group’s management and to engage in dialogue (exchange views and engage in discussions) about Tokio Marine Group’s CSR initiatives.*

*Additionally, Tokio Marine Group performs plan-do-check-act (PDCA) management through our proprietary Green Assist environmental management system, which draws on ISO 14001, and engages in energy conservation and resource conservation activities. The head office of Tokio Marine & Nichido has adopted an environmental management system based on ISO 14001 in fiscal 1999. At Group companies in Japan and overseas, we are introducing our unique environmental management system through collaboration with Tokio Marine Holdings and Tokio Marine & Nichido. Each year, we identify and assess environmental issues, including climate-related risks, and define environmental targets.*

*Meanwhile, Tokio Marine Group engages in research through collaboration with The University of Tokyo, Nagoya University, Kyoto University and other organizations to look into the impact of climate change on the insurance business over the short, medium and long terms and to identify and assess climate-related*

*risks. As an example outcome, the Group has learned that under future climate conditions (about 100 years from now), an increase in the average typhoon intensity will increase typhoon risk.*

*Tokio Marine Group promotes Enterprise Risk Management (ERM) that seeks to increase corporate value by integrating risk-based decisions into all aspects of business and using capital adequacy and profitability relative to risk as metrics for making management decisions. Under the ERM framework, we conduct risk management while taking into consideration various factors, including the research results such as the said change in typhoon risk under future climate conditions as well as the impact on insurance losses caused by a change in flood risk as a result of increased rainfall. Moreover, at the ERM Committee comprising top management of Group companies in and outside Japan, we identify material risks surrounding Tokio Marine Group and develop policies to respond to these risks. Material risks identified in fiscal 2018 included major wind and water disasters in Japan and major natural disasters overseas. In identifying material risks, we have adopted a system to monitor all risks, including emerging risks resulting from environmental and other changes, and comprehensively assess these risks using both quantitative factors (such as economic loss and frequency of occurrence) and qualitative factors (including business continuity and reputation). We also perform stress tests using scenarios of low frequency but high consequence major natural disasters and other extreme events.*

**Climate Risk Management**

*Tokio Marine Group sees risks and opportunities associated with natural disasters including the impact of climate change, as an important factor in insurance underwriting. At Tokio Marine Holdings, risks are controlled by allocating management resources to match net assets (i.e., keeping the level of insured risk within allowable limits), in order to adequately absorb losses within the scope of its net assets, even in the event of catastrophes.*

**The Climate Change Business Research Working Group**

*Tokio Marine Group established the Climate Change Business Research Working Group (CCWG) under the Global Warming Research Project in fiscal 2006, in order to conduct qualitative and quantitative analysis of climate change risk, clarify the risks and opportunities for business by climate change, and evaluate the extent of impacts on business. CCWG has now been integrated into Annual CSR Policy and Initiatives of Tokio Marine Group.*



**3.2**  
**Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.**

**“Green Gift” Project**

Since May 2009, TMNF has been promoting customer-participative eco-friendly insurance products entitled ““Green Gift” Project” by recommending policyholders to choose online insurance policy wording for insurance products such as personal auto and fire insurance policies. When a customer selects the internet option instead of receiving paper wordings, the company donates funds corresponding to a portion of the value of the reduction in paper reduced to various environmental NPOs/NGOs including three mangrove planting NGOs; OISCA, ACTMANG and ISME.

The results of this project for fiscal 2016-2018 are as follows.

	Fiscal 2016	Fiscal 2017	Fiscal 2018
Reduction in the annual amount of paper used	2,950 tons	2,990 tons	2,820 tons
Number of customers (contracts) selected web policy options	10.8 million	11.1 million	11.3 million
Percentage of super insurance customers (contracts) selected online policy options	82.7%	83.6%	84.8%

**Green Gift Project/Mangrove Planting Project**

As articulated in the Sustainability Report, the project has covered nine countries in the Asia-Pacific, with a total coverage of 10,550 hectares as of March 2019. Conceptually, TMNF offers its customers an opportunity to satisfy their inherent desire to behave environment-friendly by pledging to plant mangrove on their behalf, while exercising its traditional function as an insurance company. TMNF initiated this project in the hope to work together with customers to protect the global environment.

The planting process requires the involvement of national or rural forestry authority, NGOs with credible knowledge and experience, and the local community. With 20 years of continuous collaborative efforts, the project has

reached a stage where local communities are running their lives enriching the bio-diversity surrounding the mangrove forest and harvesting from the revived natural system.

In the wake of March 11, 2011 earthquake and tsunami which hit Japan's Tohoku Region, a number of TMNF's production offices heard voices of expectation from their customers and agents to introduce an initiative to preserve the nature of Japan, its home country, in addition to the mangrove planting activities that take place overseas. In response, TMNF launched the "Green Gift II" project effective October 2013. While maintaining its flagship mangrove planting activities, "Green Gift II" broadened the scope of qualified insurance products and expanded the scope of subject materials from policy wordings to include policies and renewal instructions, thus enabling support to promote domestic nature conservation efforts taking place in various parts of Japan. By dividing Japan into 16 regional blocks, TMNF's branch operation in charge of each regional block is entitled to plan environmental activities intended to serve local community residents to learn the importance of nature conservation. The planning and organization is conducted with the involvement of regionally active NPOs which specialize in environmental issues, and with the assistance of regional Environmental Partnership Offices, which are administrative arms of the Ministry of the Environment, along with the Nippon NPO Center, which functions as the national coordinator of the program. It marked the first opportunity for TMNF to engage with a group of NPOs to put in place a program which linked insurance products with local communities on a nationwide scale. By the end of fiscal 2013, all 16 blocks successfully initiated their activities. The "Green Gift II" is run in line with the Act for the Promotion of the Environmental Activities through the Enhancement of Environmental Education, which encourages private sector to work with local communities and the public sector to promote awareness on environmental protection. The project thus receives official "support" from the Minister of the Environment.

Since October 2016, TMNF has revitalized its domestic environmental protection activities by implementing "Green Gift Planet GENKI Program" with a plan set to conduct the program over the course of 3 years in 22 regions. The activities offer the chance for local NPOs and other groups to collaborate with stakeholders including TMNF, its agents and its customers.

<http://www.tokiomarinehd.com/en/sustainability/theme2/productservice02.html>

**Provision of Insurance Products and Services Related to Renewable Energies**  
Japanese Government launched the feed-in tariff scheme for renewable energy in July 2012.



Tokio Marine group companies provide a variety of insurance products, investment funds and consulting services related to renewable energies including solar energy and geo thermal energy.

TMNF launched a mega-solar package program which combines insurance coverage (e.g. property, liability, warranty) and risk consulting services for solar power plant facilities in July 2012 and provided its corporate customers with the program in fiscal 2018.

TMNF started sales of a geothermal package plan underwriting property, construction, liability risks.

<http://www.tokiomarinehd.com/en/sustainability/theme2/productservice02.html>

**Participation in the world’s first “Pandemic Emergency Financing Facility” by the World Bank**

It is said that climate change will induce serious infectious diseases currently prevailing in tropical and subtropical zones such as Malaria and dengue fever to the temperate zones. Since July 2017, TMNF has participated in the “Pandemic Emergency Financing Facility (PEF) “which was established by the World Bank as an international initiative for the management of infectious disease crisis.

Through underwriting of pandemic derivatives, we will support Public-Private collaborative efforts towards international threatening infectious diseases and contribute to the creation of safe, secure and sustainable future.

In fiscal 2019, Tokio Marine Group will continue promoting the above initiatives.

Tokio Marine Group promoted various disaster risk reduction initiatives informing current and prospective customers of climate and natural disaster risks and providing support and tools for reducing risks.

**Activities supporting climate awareness amongst our Societies**

Tokio Marine Group holds seminars related climate risks mainly for public.

TMNF and Tokio Marine Research Institute (TMRI) hosted the natural disaster risk seminar entitled "Frontier of natural disaster research —Tsunami Risks and Expected Responses from Business Communities and Local Governments" on November 2, 2017.

[http://www.tmresearch.co.jp/seminarresult/seminar\\_12/](http://www.tmresearch.co.jp/seminarresult/seminar_12/) (in Japanese)

In fiscal 2018, TMNF and TMRI held the natural disaster risk seminar entitled

*“Frontline of natural disaster risk researches”.*

**Climate Change-related Consulting Services**

*Tokio Marine & Nichido Risk Consulting (TRC) offer climate change consulting services to a diverse range of corporations.*

*Examples:*

- Integrated consulting in the environmental field  
(Consulting on environmental risk analysis, support to develop ISO environmental management systems, soil contamination and environmental liability)*
- Consult for business risk on solar power plant projects - Soil contamination consulting,*
- Consult environmentally friendly and safe driving*
- Consult carbon management (lifecycle assessment) for products and services*
- Publication of Talisman magazine, organization of environmental seminars*

**Disaster Prevention Lessons**

*This is a program aiming to raise readiness for disaster prevention among school children conducted by volunteer employees who wanted to contribute to disaster-resilient society by making use of their own knowledge and expertise.*

*Based on the lessons learned from the 2011 Great East Japan Earthquake, TMNF started to conduct the lesson by using educational materials originally developed by TRC employees and then supervised by International Research Institute of Disaster Science (IRIDeS) of Tohoku University.*

*In fiscal 2018, Tokio Marine Group’s employees and agents as instructors conducted approx.130 lessons for approx. 10,100 elementary school children, etc. (total 540 lessons for approx. 40,000 elementary school children, etc. as of March 2019) throughout Japan.*

*Prompted by the disaster education program developed in Japan, Tokio Marine & Nichido Fire Insurance Company (China) developed its original program and put into practice in Shanghai in 2016. It has been further expanding beyond Shanghai since 2017 and more than 1,500 students in eight cities participated in this program.*

**BCP planning support program**

*This program for small to medium-sized companies (SMCs) provided by approx. 100 employees at TMNF who had finished required training programs for instructor. The workshops are hosted in collaboration with local governments, chambers of commerce, financial institutions, etc., and participation is free of charge. In contrast to an ordinary one-way seminar, the workshop starts with a*

virtual experience of the earthquake which makes participants feel strong needs for BCP. Then, participants work on formulating the key substance of BCP in a groupwork style. Furthermore, the lecturers follow up the participants until the completion of BCP planning after the workshop.

In fiscal 2017, more than 80 workshops have already been convened across Japan, and more than 800 companies have participated in the workshops.

#### **Earthquake-risk awareness raising brochure**

TMNF and TRC jointly developed an earthquake-risk awareness raising brochure “Rethink Now! Earthquake in the Foreseeable Future and Preparation for it”, and “Easy, Understandable BCP Planning sheet” which enables SMCs to overlook the big picture of BCP and take their first steps for formulating their own BCP. These tools are expected to support SMCs and their supply chains to enhance the level of overall BCP and accordingly improve the effectiveness of the BCP through ensuring employees understand necessary information. As of March 2018 (2017), eleven kinds of BCP Planning Sheet are available for industries of manufacturing, construction, retailing, transportation, hotel elderly care facility, etc., and more than 73,000 (40,000) brochures have been distributed to companies, local governments and chambers of commerce through Tokio Marine Group employees and agents.

#### **Japan Resilience Award**

“Disaster Prevention Lesson” and “Business Continuity Plan (BCP) Workshop in collaboration with local governments and chambers of commerce” won “Best Resilience Award” and “Excellent Resilience Award” respectively at the Japan Resilience Award 2017. Also, initiatives of “Rethink Now! Earthquake in the Foreseeable Future and Preparation for it” and “Easy, Understandable BCP Planning Sheet” won “Excellent Resilience Award”.

[http://www.tokiomarinehd.com/en/release\\_topics/release/h10q7e000000qvz9-att/20170327\\_e.pdf](http://www.tokiomarinehd.com/en/release_topics/release/h10q7e000000qvz9-att/20170327_e.pdf)

#### **The Disaster Recovery Support Services in collaboration with BELFOR**

The services of BELFOR contribute to the reduction of waste by promoting the cleaning and repair of buildings and facilities as part of disaster recovery support. In partnership with BELFOR Japan, TMNF is offering disaster recovery support services for corporate comprehensive property insurance. Under these riders, in the event a client experiences damage, BELFOR immediately dispatches personnel to the site and takes steps to protect the damaged property. TMNF responds to pay out insurance claims to cover the costs for the restoration of the equipment



and facilities. After the Great East Japan Earthquake and flooding in Thailand, TMNF provided support for many corporations for the early recovery of their business activities.

In fiscal 2018, TMNF advanced initiatives for promoting a widespread use of BELFOR in an emergency through the collaboration between customer management departments and insurance claims services departments. TMNF conducted several hundred times of insurance claims survey visits for promoting reducing, reusing, recycling waste emissions.

In fiscal 2019, TMNF will promote the same kind of initiatives as the previous year.

Tokio Marine Group aims to assist markets with low insurance penetration to understand and respond to climate change through providing micro-insurance products and services.

**Weather Insurance and Micro-insurance in Developing Countries**

Since 2014, Tokio Marine Group's IFFCO-TOKIO General Insurance (ITGI) has provided micro-insurance products in India. ITGI's micro-insurance initiatives are driven by the vision of its parent company Indian Farmers Fertiliser Cooperation (IFFCO) which seeks to improve the quality of life of the Indian farmer. Rather than merely downscaling existing products, it has leveraged IFFCO's experience of the rural market to craft a product basket designed specifically for the agricultural sector.

In fiscal 2018, ITGI promoted providing customers with various micro insurance products as follows.

<i>Micro insurance product</i>	<i>Brief description</i>
<i>Sankatharan Bima Yojna</i>	<i>Accident insurance attached to fertilizer products.</i>
<i>Janta Bima Yojna</i>	<i>Micro property insurance</i>
<i>Mahila Suraksha Bima Yojna</i>	<i>Accident insurance for women in farming area</i>
<i>Rashtriya Swasthya Bima Yojna (RSBY)</i>	<i>Medical insurance for low-income people</i>
<i>Biju Krushak Kalyan Yojana (BKKY)</i>	<i>Add-on medical insurance for low-income people</i>
<i>Pradhan Manti Fasal Bima Yojana (PMFBY):</i>	<i>Weather-based crop insurance</i>

Please see crop & weather insurance’s gross written premium as follows.

Gross written premium (GWP) (Unit: Rs in Million)

Year	2012	2013	2014	2015	2016	2017	2018
GWP	2,058	2,013	1,571	911	12,552	10,773	19,341

Please see IFFCO-TOKIO General Insurance's website for further information.

<https://www.iffcotokio.co.in/micro-rural-insurance>

<http://www.tokiomarinehd.com/en/sustainability/theme1/poverty.html>

In fiscal 2019, Tokio Marine Group will continue to provide customers in low insurance penetration markets with the above products.

**Investment in Environmental Technologies (Renewable Energy)**

Tokio Marine Asset Management launched TM Nippon Solar Energy Fund 2012 managing 9 billion yen in 2012, TM Nippon Solar Energy Fund 2013 managing 13.5 billion yen in 2013, and TM Nippon Solar Energy Fund 2014 managing 7.9 billion yen in 2014 for large-scale photovoltaic installations in Japan. These funds are for large investments in domestic photovoltaic installations for the national “Feed-in Tariff Scheme for renewable energy,” which started operating in July 2012.

TMAM managed the above renewable energy funds in fiscal 2017 and will continue managing them in fiscal 2018.

**Investing in Clean Energy**

TMNF is investing in environmental venture businesses such as clean energy development projects, industrial waste treatment businesses, and so on. Total investment in this area since 2000 has amounted to several billion yen.

**Investing in Green Bonds**

For creating a safe, secure and sustainable future, TMNF invested JPY 70 million in Green Bonds issued by Nomura Research Institute in September 2016.

**Tokio Marine Low Carbon Japanese Equity Fund**

TMAM launched a new product, “Tokio Marine Low Carbon Japanese Equity Fund” on November 27, 2017, a fund that is comprised of corporations actively reducing CO2 emissions.

The goal of Tokio Marine Group is to contribute to the realization of the United Nations Sustainable Development Goals and the Paris Agreement. We believe that this new product will support the realization of a low income economy from

*an investment perspective. With ESG investment becoming more prominent in Japan, the fund distinguishes itself from other existing ESG funds by investing in Japanese corporations which contribute to the reduction of CO2 emissions and the creation of a low carbon economy.*

**Planned Activities**

*Tokio Marine Group plans to continue the above activities in fiscal 2019.*

**PRINCIPLE 4 - REDUCE THE ENVIRONMENTAL IMPACT OF OUR BUSINESS**

**4.1**  
Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.

***Reducing of environmental footprints with value chain partners***

*For Tokio Marine Group, promoting environmental management is crucial in implementing our Corporate Philosophy. We believe that working proactively to contribute to the resolution of environmental challenges and create environmental value leads to greater sustainable corporate value for the Group.*

*Tokio Marine Group states in our Corporate Philosophy, “Acting as a good corporate citizen through fair and responsible management, Tokio Marine Group will broadly contribute to the development of society,” and in the Tokio Marine Group CSR Charter concerning protection of the global environment, “Acknowledging that the protection of the global environment is an important responsibility for all corporate entities, we respect the harmonization with and the improvement of the global environment in all of our activities.”*

*In our new Mid-Term Business Plan “To Be a Good Company 2020,” “Protecting the Earth” has been set as a core CSR theme, and we are working to create environmental value in various ways through general Group business activities.*

*Tokio Marine Group aims to contribute to the resolution of environmental issues that include alleviation of and adaptation to climate change, the preservation of biodiversity and creation of a resource-recycling society and connect this with greater corporate value. With this in mind, we are implementing a variety of initiatives in collaboration with various stakeholders.*

*In order to contribute to the alleviation of climate change, we are working to reduce the environmental footprint through full employee participation. In addition, we have achieved carbon neutral status for the sixth time in six consecutive years from fiscal 2013 to fiscal 2018 by planting mangrove trees that provide the benefit of CO2 absorption and fixation, and through the purchase of green power.*

*In order to contribute to alleviation of and adaptation to climate change, preservation of biodiversity and creation of a resource-recycling society, we are striving to enhance employees’ environmental awareness, conserve energy and boost environmental performance in the buildings we own and reduce paper*



consumption, among other efforts. Further, we encourage eco-safe driving throughout the value chain, utilize recycled parts and support the acquisition of Eco Action 21 certification.

Tokio Marine encourages its value-chain partners, “Insurance agents” and “Automobile repair shops” to improve the environmental sustainability of their products and services. Insurance agents are encouraged to work with insurance policy holders to reduce the environmental footprint by adopting web-based policy/wording instead of paper-based policy/working.

**Promoting the use of web-based insurance policy instead of paper-based policy**

Tokio Marine encourages its insurance agents and customers to promote the use of web-based insurance policy instead of paper-based policy. Customers’ selection of the web policy option leads to the conservation of paper resources.

Additionally, it allows the company and agents to reduce the environmental footprint created by the manufacture of paper and its transport to the company, the mailing of policies to customers and the disposal of policies when unneeded after maturity. The Green Gift Project also provides a number of other beneficial effects. These include conserving paper resources and contributing to the prevention of global warming and the preservation of biodiversity via mangrove planting activities and communicating to children, who will lead future generations, the importance of the earth’s environment through their actual participation in environmental protection activities in Japan. In fiscal 2018, the number of agreements taking advantage of the Web policy option was approximately 11.3 million, representing a reduction in paper usage of approximately 2,820 tons.

**Promoting the use of recycled auto parts**

Tokio Marine encourages automobile repair/maintenance shops to use recycled/rebuilt auto parts in automobile insurance claims services.

From the perspective of creating a recycling-based society and reducing the burden on the environment (i.e., constraining CO2 emissions from the manufacture of parts), Tokio Marine Group is calling on its value-chain partners to engage in actively using recycled auto parts\* when repairing vehicles used by Group companies.

Furthermore, TMNF, Nisshin Fire & Marine Insurance and E. design Insurance are taking action in calling for the use of recycled auto parts\* and proposing the use of these parts to individual and corporate customers that have met with accidents.



Number of recycled auto parts used in FY2018: approximately 47,900.

\* Recycled auto parts are said to have an effect in reducing CO2 emissions compared with new parts: for example, 23.1 kg for a bumper, 97.3 kg for a door, etc. (Source: Survey by the General Insurance Association of Japan)

With the approval of customers, TMNF is making efforts to expand the use of recycled parts. The company's actions include distributing pamphlets to boost awareness of the Recycled Parts Usage Promotion Campaign among agents and auto repair shops,

as well as creating content for tablet devices to aid these businesses in easily explaining the merits of recycled parts to customers.

**Support for taking Eco-Action 21 certification**

For insurance agents operating automobile maintenance shops, TMNF Auto Support Center (TMASC) provides support for certification and registration of Eco-Action 21 (environmental system for small- and medium-sized enterprises), the environmental management system for small- and medium-sized enterprises formulated by the Ministry of the Environment. Specifically, the company holds business seminars for interested agents to explain the necessary steps for certification and offers practical support. Through the company's support, the auto maintenance shops have acquired certification.

TMASC supported small- and medium-sized auto maintenance shops in fiscal 2018 and will continue to support them in fiscal 2019.

**Planned Activities**

Tokio Marine Group plans to continue the above activities in fiscal 2019.

**4.2**  
**Disclose our Scope 1 and Scope 2 GHG emissions and Scope 3 GHG emissions using a globally recognised standard.**

**Tokio Marine Group's Scope 1, Scope 2 and Scope 3 CO2 emissions**

Tokio Marine Group's CO2 emissions figures in the following table are based on the GHG Protocol, Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain issued by Ministry of the Environment and Ministry of Economy, Trade and Industry, and other internationally and/or nationally recognized standards.

(Unit: tons/CO2)

	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
Scope 1	14,954	14,916	14,474	15,007
Scope 2	77,854	76,037	72,069	67,203
Scope 3	29,472	28,466	28,702	29,300
Category 1	17,036	15,499	15,580	14,765

Category 3	5,589	5,582	5,459	5,280
Category 5	855	748	802	1,070
Category 6	5,992	6,638	6,824	8,186
TOTAL	122,280	119,420	115,244	111,509

Tokio Marine Group set the fiscal 2018 CO<sub>2</sub> emissions (Scope 1+2+3) reduction target of 1% compared with the previous fiscal year and resulted in 3.2% reduction of 111,509 tons /CO<sub>2</sub>, achieving the fiscal 2018 target. This is mainly due to the all -employee participative environmental footprint reduction efforts. The Group also set the fiscal 2018 CO<sub>2</sub> emissions per employee (Scope 1+2+3) reduction target of 1% compared with the previous year and resulted in 4% reduction of 2.82 tons/CO<sub>2</sub>, achieving the fiscal 2018 target.

Please see the following link for further information.

<https://www.tokiomarinehd.com/en/sustainability/library/pdata.html>

Fiscal 2018 figures will be published in Sustainability Report 2019

Japanese/English in September 2019/November 2019.

Please see "Core Theme 2: Protecting the Earth" of "Plans and Results of CSR Initiatives". You can find KPIs and targets for CO<sub>2</sub> emissions from Tokio Marine Group's operations in the following link.

[https://www.tokiomarinehd.com/en/sustainability/group\\_csr/maintheme.html](https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html)

Scope 3 CO<sub>2</sub> emissions include "Category 1: Purchased paper", "Category 3: Fuel and energy-related activities not included in Scope 1 and 2", "Category 5: Waste generated in operations", and "Category 6: Business travel (by air)".

Fiscal 2018 CO<sub>2</sub> emissions by Tokio Marine Holdings and its major subsidiaries were 111,509 tons, which was -3.2% of emissions in the previous fiscal year. The effect of CO<sub>2</sub> fixation and reduction due to mangrove planting, etc., was 153,335 tons and carbon neutral status was achieved for the sixth year in succession for the Group overall (Japan and overseas).

<https://www.tokiomarinehd.com/en/sustainability/csrmanagement/reduction.html>

Methodologies used to calculate the above data are as follows.

[https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr\\_indicators.pdf](https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr_indicators.pdf)

	<p><b>Planned Activities</b></p> <p>Tokio Marine Group set the fiscal 2019 CO2 emissions (Scope 1+2+3) reduction target of 1% compared with the previous fiscal year and plans to reduce its emissions for achieving its target.</p>																														
<p><b>4.3</b></p> <p><b>Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.</b></p>	<p><b>Tokio Marine Group’s other key environmental data for the last four years</b> (Unit: MWH for energy and electricity and tons for others)</p> <table border="1"> <thead> <tr> <th></th> <th>Fiscal 2015</th> <th>Fiscal 2016</th> <th>Fiscal 2017</th> <th>Fiscal 2018</th> </tr> </thead> <tbody> <tr> <td>Energy usage</td> <td>220,194</td> <td>220,098</td> <td>214,113</td> <td>203,521</td> </tr> <tr> <td>Electricity usage</td> <td>148,124</td> <td>148,466</td> <td>145,944</td> <td>140,803</td> </tr> <tr> <td>Paper usage</td> <td>9,309</td> <td>8,469</td> <td>8,514</td> <td>8,068</td> </tr> <tr> <td>Water usage</td> <td>718,785</td> <td>751,328</td> <td>602,169</td> <td>570,832</td> </tr> <tr> <td>Waste emitted</td> <td>2,441</td> <td>2,429</td> <td>2,072</td> <td>2,248</td> </tr> </tbody> </table> <p>Due to the success of Tokio Marine Group’s efforts on reducing environmental footprints, all KPIs tend to decrease in the four years.</p> <p>Tokio Marine sets the fiscal 2018 targets of the above key KPIs and results are as follows. Targets are set to contribute to the achievement of Tokio Marine’s long-term emission reduction targets; 60% reduction in fiscal 2050 and 40% reduction in fiscal 2020 compared with fiscal 2006 figures.</p> <ul style="list-style-type: none"> <li>-Energy consumption reduction of “one percent” compared with fiscal 2017: Achieved in fiscal 2018.</li> <li>-Paper consumption reduction of “one percent” compared with fiscal 2017: Achieved in fiscal 2018.</li> <li>-Promote 3R (Reduce Reuse, Recycle) and waste emissions reduction of “zero percent” compared with fiscal 2017: Missed to achieve in fiscal 2018.</li> </ul> <p><a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/maintheme.html</a></p> <p>Methodologies used to calculate the above data are as follows. <a href="https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr_indicators.pdf">https://www.tokiomarinehd.com/en/sustainability/library/pdf/csr_indicators.pdf</a></p> <p><b>Planned Activities</b></p> <p>Tokio Marine Group set the fiscal 2019 electricity usage reduction target of 1% compared with the previous fiscal year and plans to reduce its emissions for achieving its target.</p>		Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Energy usage	220,194	220,098	214,113	203,521	Electricity usage	148,124	148,466	145,944	140,803	Paper usage	9,309	8,469	8,514	8,068	Water usage	718,785	751,328	602,169	570,832	Waste emitted	2,441	2,429	2,072	2,248
	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018																											
Energy usage	220,194	220,098	214,113	203,521																											
Electricity usage	148,124	148,466	145,944	140,803																											
Paper usage	9,309	8,469	8,514	8,068																											
Water usage	718,785	751,328	602,169	570,832																											
Waste emitted	2,441	2,429	2,072	2,248																											



<p><b>4.4 Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.</b></p>	<p><b>Initiatives for Energy Conservation and the Reduction of Environmental Footprint</b></p> <p><i>Responding to the calls for energy conservation (in particular, the restraint of electricity consumption during peak periods) following the Great East Japan Earthquake of March 2011, Group companies in Japan are implementing Summer &amp; Winter Electricity-Saving Measures as an initiative to firmly establish electricity and energy conservation. Specifically, the companies are making continuous efforts to (1) conserve energy in offices (reducing unneeded light fixtures, placing restrictions on use of items (OA equipment, copiers, etc.) around power outlets and thoroughly managing air conditioning (such as setting temperatures in offices to 28°C in summer and 19°C in winter); and (2) review employees’ work styles (such as encouraging early morning working hours and promoting casual dress). Further, we are making efforts to curb CO2 emissions from energy usage, such as by expanding our use of TV/Web conferencing systems and restricting air travel for business (which also reduces costs).</i></p> <p><i>In addition, Tokio Marine &amp; Nichido endorses COOL CHOICE, a national campaign that encourages all “smart choices” that contribute to countermeasures for global warming, including for Japan’s energy-saving and low-carbon products, services and behavior in order to attain the Japanese government’s target of a 26% reduction in greenhouse gas emissions by 2030 compared with fiscal 2013. We are promoting activities to realize a low-carbon society.</i></p> <p><b>Effective Use of TV/Web conferencing</b></p> <p><i>By making effective use of TV/Web conferencing, Tokio Marine &amp; Nichido is reducing greenhouse gases resulting from employee business travel and is striving to raise business processing efficiency. Tokio Marine &amp; Nichido has presently introduced and is actively utilizing more than 300 teleconferencing systems at its business bases and by doing so is limiting the number of employee business trips and reducing business travel expenses.</i></p> <p><b>Resource Conservation in Buildings and Facilities</b></p> <p><i>Tokio Marine Group’s companies are engaged in initiatives* that consider the environment and disaster prevention in buildings and facilities, as appropriate for each structure.</i></p> <p><i>Estimated facilities investment value related to energy conservation measures: 588 million yen (fiscal 2017, Tokio Marine &amp; Nichido)</i></p> <p><i>*</i></p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



*Upgrading to boilers, high-efficiency lighting fixtures (LED, etc.) and air conditioning, etc.*

**The S-rank Building under CASBEE**

*At Tokio Marine & Nichido, the company's Nagoya Tokio Marine & Nichido Building, which was completed in 2013, gives high consideration to the environment with features that include double-glazed window glass and LED lighting throughout the entire building. This building has earned the S-rank, the highest rank under Comprehensive Assessment System for Building Environmental Efficiency (CASBEE) Nagoya, a building environmental performance evaluation system operated by Nagoya City.*

*This building has secured the top-tier Platinum ranking under the DBJ Green Building Certification System operated jointly by the Development Bank of Japan and Japan Real Estate Institute. Furthermore, in January 2015 it was certified as an excellent Eco-Oriented Business by Nagoya City due to voluntary and proactive efforts to be kind to the environment in its business activities. It also won the 22nd Aichi Machinami Architecture Award in recognition of its contribution to the formation of a pleasant local environment, and in December 2015 it won Outstanding Performance Award for Eco-Oriented Businesses certified by Nagoya City.*

*In addition, Tokio Marine & Nichido was recognized by Osaka Prefecture for initiatives and achievements in reducing greenhouse gases in offices and won the Excellence Award in the Osaka Stop Global Warming Awards.*

*At Group companies overseas, as in Japan, we are taking measures to conserve energy as appropriate for each building or facility. As an example, Tokio Marine Centre (Singapore) has been actively introducing environmentally conscious measures that include the installment of energy-saving air-conditioning equipment and lighting fixtures, installment of water-saving equipment that reuses rainwater and placement of greenery.*

**Initiatives to Reduce Paper Use**

*Tokio Marine Group's volume of paper consumed in fiscal 2018 was 8,068 tons (Japan: 7,355 tons, overseas: 713 tons), which marked a decrease of 5% on a year-on-year basis (down 2.5% in Japan and up 26.6% overseas). The increase in overseas was virtually offset by the reduction in Japan. In fiscal 2018, we are taking actions under a target of reducing paper volume in Japan by 1% from the*

*previous fiscal year.*

*As a measure to curb paper consumption, Group companies are distributing mobile terminals (tablets, PCs) to employees as a measure to reform working styles while reduce paper consumption, along with promoting the paperless Raku Raku Tetsuzuki (Quick and Easy Online Procedures) when applying for insurance on their tablet or other device, the use of paperless conferencing, using green procurement of stationery and office supplies, shifting forms and pamphlets to Web formats (i.e., promoting paperless use) and firmly establishing the use of double-sided copying and aggregate printing.*

<https://www.tokiomarinehd.com/en/sustainability/csrmanagement/reduction.html>

***Planned Activities***

*Tokio Marine Group plans to continue the above activities and further promote “Work Style Reforms” which include Notebook/Tablet PCs-dependent work style without paper printing in fiscal 2019.*

**PRINCIPLE 5 - INFORM PUBLIC POLICY MAKING**

<p><b>5.1</b></p> <p><b>Promote and actively engage in public debate on climate-related issues and the need for action. Work with policy makers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.</b></p>	<p><b><i>International Public Policy Making</i></b></p> <p><i>TMNF works with policy makers nationally and internationally by itself and through domestic and international initiatives.</i></p> <p><a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/evaluation/index.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/evaluation/index.html</a></p> <p><b><i>Asia-Pacific Financial Forum</i></b></p> <p><i>TMNF has been leading the Asia-Pacific Financial Forum(APFF)'s discussion on Disaster Risk Financing and Insurance (DRFI) since 2015. APFF functions as a platform where experts from both public and private sectors convene to deliver solutions to financial issues relevant to the member economies of the Asia Pacific Economic Cooperation (APEC). DRFI was recognised by the APEC Finance Ministers' Process (FMP) as one of the top priorities under the Cebu Action Plan (CAP) agreed by APEC FMP in 2015.</i></p> <p><i>Subsequently, in order to advance relevant policy making and to implement solutions to strengthen financial resilience of APEC economies to natural disasters, APEC FMP established the Working Group on Disaster Risk Financing Solutions which consists of nine APEC economies, namely Canada, New Zealand, Japan, the United States, Indonesia, the Philippines, Mexico, Chile and Peru, and four international organizations including APEC Business Advisory Council (ABAC), in 2016. Tokio Marine is taking part in the Working Group as a member of ABAC as well as APFF. As part of the Working Group's work plan for 2018-2019, Tokio Marine participated in the "Workshop on Developing the Elements of a Disaster Risk Financing Strategy," held on 8-9 May, 2018 in Bangkok. The workshop was led by the OECD, and attracted more than fifty finance ministry officials in and out of APEC region. The event highlighted practical issues in designing a DRFI program.</i></p> <p><i>The Working Group also shed light on financial management of public assets against disaster risks. At the 2-day workshop held on 21-22 June, 2018 in Tokyo, organized by the World Bank, which attracted around forty finance ministry officials from APEC economies, Tokio Marine presented a case study on "Risk Financing Program for the Extended Shinkansen Infrastructure." The presentation covered a practical example on how private sector expertise, such</i></p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



as quantifying expected loss using risk models and arranging optimal risk transfer schemes, can be utilized in designing an effective DRFI program. The presentation prompted endless questions and comments, which was indicative of the participants' Interest in practical solutions. The learnings from the workshop formed part of the reporting package to be submitted to the APEC Finance Ministers' Meeting held in Papua New Guinea in October 2018. It was encouraging to hear from both the incumbent chair economy (Papua New Guinea) at the time and the succeeding chair economy (Chile) that the subject of DRFI would remain as a key priority going into 2019. Tokio Marine stays committed to the activities of the APEC Working Group on Disaster Risk Financing Solutions through its participation in ABAC/APFF.

**Geneva Association’s Extreme Events and Climate Risk Working Group**

Tokio Marine has been co-chairing The Geneva Association(GA)'s Extreme Events and Climate Risk (EE+CR) Working Group since its launch in 2008. As the GA member representing Tokio Marine switched from Mr.Shuzo Sumi to Mr.Tsuyoshi Nagano, the co-chairmanship transitioned accordingly. To assist the work of Ms.Maryam Golnaraghi, the GA's Director in charge of the EE+CR, Tokio Marine seconded a manager-level individual to the GA for 15 months between April 2017 and June 2018.

Soon after Mr.Nagano's assuming the co-chairmanship role, a report entitled "Climate Change and the Insurance Industry: Taking action as risk managers and investors" was released on 22 January, 2018. The report is based on interviews with 62 C-suite executives from 21 insurance companies with diverse business models and regions. The report is intended to facilitate the industry's outreach efforts to raise public awareness on how the insurance industry can effectively reduce the negative social impact of weather-related disasters exacerbated by climate change. To make the most of the report's impactful message, Tokio Marine led a discussion session specifically for Japanese insurance industry experts who are involved in environmental and social issues, by highlighting the key findings and recommendations of the GA's report. The session was held as an activity of the Principles for Financial Action for the 21st Century (PFA21), under the auspices of the Ministry of the Environment, and attracted 16 experts who actively participated in the discussion.

At the GA's General Assembly of 2018, the EE+CR organized a panel discussion entitled "Climatonomics." Co-chaired by Mr.Denis Kessler of SCOR and Mr.Nagano, the session welcomed leading academia in the field of climatology



and economics, namely Messrs. Thomas Sterner, Christian Gollier and Masahide Kimoto. The session focused on how the insurance industry can contribute further in designing effective climate policies. The session sparked active dialogue among the participating GA members.

Aside from the above, the GA's EE+CR WG was running multiple projects in parallel in fiscal 2018. GA report "Managing Physical Climate Risks: Leveraging Innovations in Catastrophe Risk Modeling" on flood risk management featuring major flood-prone countries was published on November 20, 2018. The high-level conference on "Climate Resilient and Decarbonized Critical Infrastructure" was held on 18-19 September 2018 in Toronto, Canada. Task Team on "Linking Sustainability, Climate Risk with Investing" was newly established. Tokio Marine is actively involved in all of the four projects.

#### **Insurance Development Forum (IDF)**

TMHD became a steering committee member of the IDF in September 2018, and subsequently an operating committee in January 2019. As an active player to promote disaster risk financing and insurance in the Asia-Pacific, TMHD took a leading role to discuss the viability of establishing regional cat bonds to protect the financial interests of disaster-prone Asia-Pacific nations at the "IDF Day" event, as part of the International Insurance Society's annual Global Insurance Forum, held on 21 June, 2019, in Singapore.

#### **G20 track on energy and the environment**

"G20 Global Summit on Financing Energy Efficiency, Innovation and Clean Technology" was held on 12 June, 2019, in Tokyo to substantiate the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth. TMHD participated in the summit and presented an insurance industry perspective to promote financing needed to stir innovative technologies. The discussion culminated to the "Tokyo Declaration on Improving the Visibility and Energy Performance of Asset Investments by Financial Institutions."

#### **National Public Policy Making**

#### **Prime Ministers' Meeting on Long-term Growth Strategy under the Paris Agreement**

Mr. Shuzo Sumi, Chairman of TMHD, served as a member of the Prime Minister's high-level meeting to discuss Japan's national strategy to meet the Paris



Agreement. The meeting was convened between August 2018 and April 2019, and submitted its report to Prime Minister Shinzo Abe at its last session. Among a variety of aspirational initiatives proposed, the report contained a recommendation to promote TCFD disclosures as a strategic priority to promote green finance and investment. The recommendations set out in the report were largely incorporated in the Cabinet Decision “Japan’s long-term strategy under the Paris Agreement,” approved on 11 June, 2019, and later submitted to the UNFCCC.

**Supporting Government’s efforts to promote TCFD disclosures**

Since early 2018, key government offices, namely the Financial Services Agency (FSA), the Ministry of the Environment (MoE) and the Ministry of Economy, Trade and Industry (METI) have been actively engaging with the private sector to implement TCFD disclosures, and TMHD has been directly or indirectly involved in all such activities. Most notably, the METI published its “TCFD Guidance” in late December 2018, as a fruit of collaborative work among cross-sectoral business practitioners, including TMHD, to assist non-financial corporate players in initiating disclosure pursuant to TCFD.

**Launch of the TCFD Consortium of Japan**

Prompted by senior private sector leaders, including Mr. Shuzo Sumi, Chairman of TMHD, the “TCFD Consortium of Japan” was launched on 27 May, 2019. More than 170 entities which supported the TCFD recommendations welcomed the establishment. The group will be led by Steering Committee, which consists of 14 cross-sectoral experts including TMHD. The Consortium is expected to function as a platform for financial institutions and business corporations to jointly pursue disclosures recommended by the TCFD.

**National effort to promote climate change adaptation**

The Climate Change Adaptation Act was enacted in Japan in June 2018, which states “businesses shall endeavor in Adapting to Climate Change in accordance with the content of their business activities.” As part of its efforts to support businesses respond to the Act, the MoE released an illustrative guide for private sector companies, and TMHD was one of the ten experts invited to assist the drafting process.

**Eco-First**

Tokio Marine & Nichido works closely with Ministry of the Environment of Japan (MOE) and has been approved as one of the Eco-First companies by the ministry.

	<p><a href="https://www.env.go.jp/guide/info/eco-first/commitment.html">https://www.env.go.jp/guide/info/eco-first/commitment.html</a> (in Japanese)</p> <p>Tokio Marine &amp; Nichido became a signatory to the MOE-led initiative, the Principles for Financial Action for the 21<sup>st</sup> Century (Financial Action Towards a Sustainable Society) in 2012. It works closely with MOE by actively participating in the Insurance Working Group (IWG) activities for creating a safe, secure and sustainable society.</p> <p><b>Planned Activities</b></p> <p>Tokio Marine Group plans to continue the above activities in fiscal 2019.</p>
<p><b>5.2</b></p> <p><b>Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.</b></p>	<p><i>Responding to risks associated with “climate change and natural disasters,” one of Tokio Marine Group’s CSR material issues included in this theme, also comprises a major management issue that the global insurance industry must address in the medium to long term. Through industry-academia collaboration with The University of Tokyo, Nagoya University, Kyoto University and Tohoku University, Tokio Marine Group engages in research on climate change and natural disaster risk in an effort to gain deeper scientific insight into disaster prevention and mitigation and to raise the sophistication of measuring methods through risk modelling to ascertain risk volume in even greater detail. Our efforts in this area include development of a stochastic risk assessment approach. We believe that in addition to providing products and services in developed countries it is also important to disseminate the ideas of an insurance mechanism and risk management practices in developing countries and regions particularly vulnerable to the impact of climate change and natural disasters in accordance with the Sendai Framework for Disaster Risk Reduction 2015-2030, which provides new world guidelines for disaster risk reduction. To this end, we are working to resolve disaster issues and mitigate disaster damage globally by using the outcomes of our industry-academia research to the benefit of society and by taking part in international initiatives, such as the UNISDR Private Sector Alliance for Disaster Resilient Societies (ARISE) , The Geneva Association’s Extreme Events and Climate Risk (EE+CR) Working Group and the Insurance Development Forum (IDF).</i></p> <p><b>Building a Society Capable of Reducing and Adapting to Risks Resulting from Climate Change and Natural Disasters</b></p> <p><i>The 21st session of the Conference of the Parties to the UNFCCC (COP21) held in December 2015 adopted the Paris Agreement as a new international framework</i></p>

*of measures against climate change for 2020 onwards. As the world’s common long-term goal, the Paris Agreement aims to keep a global temperature rise below 2 degrees Celsius above pre-industrial levels. The agreement also makes a clear link between itself and the Sendai Framework for Disaster Risk Reduction 2015-2030, which was adopted at the Third United Nations World Conference on Disaster Risk Reduction held in Sendai in March 2015. There is a concern for the growing natural disaster risk due to climate change, and Tokio Marine Group, working to resolve disaster issues and mitigate disaster damage, also gives due attention to the goal of the Paris Agreement and intends to contribute to its achievement.*

*Climate change due to global warming and other factors is considered to possibly bring about major changes in the frequency and scale of weather disasters in the future. As such, basing analyses only on past statistical data may prevent appropriate risk assessment and significantly impact the calculation of insurance premiums and the ability to pay insurance claims in the event of a serious disaster.*

*In response, Tokio Marine Group conducts research on climate change and natural disaster risk and on earthquake and tsunami risk through industry-academia collaboration and presents the outcomes at conferences and forums on disaster risk reduction. We also utilize these outcomes in our social contribution activities and disseminate relevant information to the public. Additionally, we proactively participate in initiatives and events related to climate change to disseminate the outcomes and details of our industry-academia research activities to the world and engage in multi-stakeholder dialogue to share information about the latest research projects and discuss how to promote disaster prevention.*

***Research on Climate Change and Natural Disaster Risk***

***Building a Society Capable of Adapting to Climate Change and Weather Disaster Risk***

*By matching forecasts of future changes in risk due to climate change and other meteorological risk assessment approaches to a base of conventional risk assessment approaches, Tokio Marine Group is aiming to create a more advanced approach to climate change and weather disaster risk assessment.*

***Utilizing Research Outcomes to Provide Products and Services for Adapting to Climate Change***

*There is a concern that damage concerning natural disasters will increase due to climate change and the resulting greater fluctuations in natural phenomena. Tokio Marine Group is promoting initiatives to resolve weather and other disaster issues and mitigate disaster damage through its business operations. However, as changes in climate and fluctuations in natural phenomena increase, using only the past disaster and insured contingency data may prevent appropriate weather disaster risk assessment and may reduce our ability to provide insurance products and services covering weather disaster risk to customers and local communities as we have done previously.*

*In response, Tokio Marine Group seeks to promote research on climate change and weather disaster risk in collaboration with the world’s leading scientists and researchers and to use research outcomes and other various findings broadly to the benefit of society. Simultaneously, as a corporate group engaging in the insurance business, we intend to translate our research activities into the ability to sustainably provide insurance products and related services to customers and local communities.*

*Tokio Marine Group will continue to forge ahead with research on climate change and natural disaster risk with the world’s leading scientists and researchers through industry-academia collaboration and proactively leverage knowledge gained through such research.*

***Joint Research with The University of Tokyo: Forecasting Future Changes in Typhoons Using Climate Model Data***

*TMNF/TMRI (Tokio Marine Research Institute) have been working with the Atmosphere and Ocean Research Institute at the University of Tokyo since April 2006. They have been engaged in typhoon risk assessment and other studies of medium-term (to 2035) and long-term (2001-2100) climate risks. Using climate change projection simulations by running climate models on supercomputers, and Monte Carlo simulations using statistical models and high-speed computers, the study team is scientifically analyzing how typhoon risks will be affected by future climate conditions associated with global warming.*

***Joint Research with Nagoya University: Typhoon and Heavy Rain Simulation using High-Spatial Resolution Models***

*Using simulations by Nagoya University’s cloud resolution models and supercomputers, TMNF/ TMRI are scientifically analyzing how typhoon risk will be affected by changes in typhoon risk trends (scale and frequency of occurrence)*

*in the vicinity of Japan due to future climate conditions associated with global warming. They have evaluated the risk of typhoons under changing climate conditions for the near future to 2030. According to the findings, typhoons will tend to (1) be stronger (minimum core atmospheric pressure of 850 hectopascals), (2) shift their paths eastward, and (3) be generated in the northeastern region of the northwestern Pacific Ocean.*

***Joint Research with Kyoto University on Assessment of Water Disaster Risks under Future Climate Conditions***

*TMRI initiated risk assessment on flood risk associated with global warming with Kyoto University in October, 2012. There has been growing concern that the occurrence and frequency of flood risk is possibly exacerbated by climate change. The research team aims to develop a "Distributed Flow Routing Model" that forecasts the amount of flowing water after rainfalls. Subsequently, the Model is expected to produce estimation for flood risk and water damage assessment. Research results will be used to assist the Tokio Marine Group companies in terms of risk management and insurance underwriting, while offering useful information to the public. In 2016, TMNF/TMRI upgraded its water disaster risk assessment model for Arakawa River in Tokyo and completed the stochastic assessment of insurance payments of Arakawa River flood by utilizing newly-acquired future rainfall data set "d4PDF" under the future climate. TMRI published its research results on "Stochastic Flood Risk Assessment under future climate using d4PDF" at the academic conference of Japan Society of Hydrology and Water Resources in FY2017. You may find the evidence material in Japanese as per attached.*

*In fiscal 2017, TMNF/TMRI developed a water disaster risk assessment model for Red River which flows near Hanoi, the capital city of Vietnam. TMRI also started researching on water disaster risks by utilizing data set generated by "Program for Risk Information on Climate Change" sponsored by Ministry of Education, Culture, Sports, Science and Technology Japan.*

*TMRI published its research results on "Water disaster risk assessment model for Red River" at the academic conference of Japan Society of Hydrology and Water Resources in FY2018.*

***Research Presentations at Academic Societies and Other Gatherings***

*Tokio Marine will publicize the results of the above joint research to a broad audience through presentations at academic and other conferences. Since fiscal 2008, we have been continually announcing the results of joint*



*research with The University of Tokyo, Nagoya University and Kyoto University, respectively, at the Meteorological Society of Japan (twice a year).*

*Since fiscal 2013, we have been announcing the results of joint research with Nagoya University and Kyoto University, respectively, at the Japan Society of Hydrology and Water Resources (once a year).*

[https://www.tokiomarinehd.com/en/sustainability/theme1/risk\\_research.html](https://www.tokiomarinehd.com/en/sustainability/theme1/risk_research.html)

***Planned Activities***

*Tokio Marine Group plans to continue promoting Private-Academia collaborative climate-related risk researches and giving back its outcomes to a community in fiscal 2019.*

**PRINCIPLE 6 - SUPPORT CLIMATE AWARENESS AMONGST OUR CUSTOMER/ CLIENTS**

<p><b>6.1</b> <b>Communicate our beliefs and strategy on climate-related issues to our customers/ clients.</b></p>	<p><b><i>Beliefs and strategy on climate-related issues</i></b> Tokio Marine Group CEO communicated our beliefs and strategy on climate-related issues to our customers through “<b>Top Message</b>” in our Sustainability Report. You can find Group CEO’s statement “The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted in 2015 at the Third United Nations World Conference on Disaster Risk Reduction with the aim of mitigating damages from natural disasters and other causes. Moreover, amid the rise of risks other than natural disasters, including geopolitical risks, it is necessary to develop appropriate risk management solutions and build safe and secure communities. To ensure it can properly support customers and society even amid these changes, Tokio Marine Group provides safety and security throughout all its business activities. This includes carrying out industry-academia collaborative research, offering products and services to prepare for a variety of risks, participating in international initiatives, continuously supporting reconstruction of disaster-stricken regions in collaboration with partners and conducting on-site Disaster Prevention Lessons for school children.” In Top Message. <a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/message.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/message.html</a></p> <p>Tokio Marine communicated our beliefs and strategy on climate-related disaster issues to our customers through Natural Disaster Risk Seminar co-hosted by Tokio Marine &amp; Nichido and the Tokio Marine Research Institute". Tokio Marine held the Natural Disaster Risk Seminar titled “Forefront of Disaster Risk Research – Understanding extreme weather and preparing for climate-related disasters” at the international meeting hall of KEIDANREN on November 26, 2018 and approx. 260 clients gathered. Mr. Tadashi Handa, Managing Executive Officer of TMNF shared Tokio Marine’s belief that natural disasters are unavoidable but natural disaster risks can be mitigated by implementing various ex-ante counter measures including Business Continuity Plan (BCP) and strategy that it can support customers through providing insurance products and BCP formulation support services. Besides Mr. Handa, Dr. Masahide Kimoto, Professor of the University of Tokyo, Dr. Shuhei Maeda, Manager of Japan Meteorological Agency, and Mr. Kazuo Nakayama, Mayor of Ryugasaki City, Ibaraki Prefecture made speeches and communicated with audience.</p>
------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



	<p><i>Tokio Marine plans to hold “Tokio Marine Natural Disaster Risk Seminar 2019” under the theme of “Forefront of Disaster Risk Research – Understanding earthquake risks and preparing for earthquake-related disasters” in November 2019.</i></p> <p><a href="https://www.tokiomarinehd.com/en/sustainability/theme1/disaster.html#anc5">https://www.tokiomarinehd.com/en/sustainability/theme1/disaster.html#anc5</a></p> <p><i>Please see “Stakeholder Engagement -Promoting Initiatives Together with Various Stakeholders” in Sustainability Report 2019. “Customers” is one of our valuable stakeholders and you can find Engagement Policy and Contents on the following link.</i></p> <p><a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/engagement.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/engagement.html</a></p> <p><b>Planned Activities</b></p> <p><i>Tokio Marine Group plans to continue the above activities in fiscal 2019.</i></p>
<p><b>6.2</b></p> <p><b>Inform our customers/ clients of climate-related risk and provide support and tools so that they can assess their own levels of risk.</b></p>	<p><b>Natural Disaster Consulting Services for corporate customers</b></p> <p><i>The Great East Japan Earthquake and floods in Thailand prompted numerous Japanese companies to reaffirm their awareness of the importance of risk management, and the interest of companies in natural disaster risk remains high. With the aim of protecting customers from such natural disasters as earthquakes and typhoons, Tokio Marine &amp; Nichido Risk Consulting employs original analysis models to quantitatively identify in advance any earthquake and typhoon risks that may vary among regions or types of facilities and, based on this analysis, provides cost-effective risk mitigation solutions for customers. For risks concerning earthquakes, in particular, we also provide such services as developing estimates of earthquake damage based on the results of field surveys and document reviews as well as diagnosis of antiseismic capability of buildings and tsunami simulation models.</i></p> <p><b>BCP Workshop for small and medium-sized companies in collaboration with Local governments, Chambers of Commerce and other Organizations</b></p> <p><i>Tokio Marine &amp; Nichido offers a program to assist in the formulation of business continuity plans (BCP) for small and medium-sized companies. About 100 employees nationwide, who have completed the required training, serve as lecturers and offer a workshop free of charge in collaboration with our partners, including respective local governments, chambers of commerce, commerce and industry associations and financial institutions. Unlike a lecture-style seminar, the workshop starts with a simulation for participants to experience an</i></p>

earthquake to cultivate keener awareness for the need of a BCP. Then, participants engage in group work to create an outline of a BCP. After the workshop, the company provides follow-up services to help the companies complete their respective BCPs. As of March 31, 2018, more than 80 workshops have been held throughout Japan, with over 800 companies participating.

**Booklet Entitled “Rethink Now! Earthquake in the Foreseeable Future and Preparation for It” and “Easy, Understandable BCP Planning Sheet”**

Tokio Marine has developed “Rethink Now! Earthquake in the Foreseeable Future and Preparation for It,” a booklet designed to raise awareness of earthquake risk, and “Easy, Understandable BCP Planning Sheet,” a tool for small and medium-sized companies to grasp an overall picture of a BCP in one sheet and make their first step in formulating their own BCPs. Using these two tools, we aim to enable companies to raise the level of their own BCPs as well as their entire supply chain’s BCPs and to make these BCPs more viable by disseminating and instilling the idea of BCP among their employees. As of March 2018, we have developed a total of 11 versions of booklet and planning sheet sets for such industries as manufacturing, construction, retail and transportation in addition to hotels/inns and nursing homes for the elderly and have distributed more than 73,000 sets via our employees and agents to companies, local governments, chambers of commerce and commerce and industry associations.

**Preparing for Typhoons and Torrential Downpours by Using “Personalized” Videos for customers**

How we should prepare for a typhoon, heavy snow or earthquake depends on where we live and what insurance we are enrolling in. Tokio Marine & Nichido distributes “personalized” videos corresponding to customers’ varying situations, each providing customized information on necessary preparations and required insurance. These videos can be viewed from PCs, smartphones and tablet devices, and the company provides a service for customers to check information on disaster risks and details of coverage in an easy-to-understand manner.

**Disaster Prevention Lessons for school children/prospective customers**

Based on the lessons learned from the Great East Japan Earthquake, employee volunteers from Tokio Marine Group, including its agents, conduct Disaster Prevention Lessons to convey knowledge on disaster prevention to children and help them prepare for a next disaster. Disaster Prevention Lessons are a program to raise readiness for disaster prevention among elementary school children. Employee volunteers from Tokio Marine & Nichido Risk Consulting developed

*educational materials, which were then supervised by the endowed research division named the Earthquake-induced Tsunami Risk Evaluation Field established within the International Research Institute of Disaster Science (IRIDeS) at Tohoku University, with which Tokio Marine & Nichido has entered into an industry-academia collaborative agreement concerning the assessment of earthquake and tsunami risk. In the lessons, children learn about the mechanisms that cause earthquakes and tsunamis and think about how to protect themselves in an earthquake and what preparations should be made in advance, including what to take with them in an emergency, through a quiz and group discussion. The aim is to cultivate a correct understanding of earthquakes among children and the ability to prepare themselves for an impending disaster. Disaster Prevention Lessons began in fiscal 2012, and as of March 31, 2019, have been held about 540 times at elementary schools and special needs schools across Japan, with approximately 40,000 children attending. Recently, needs for lessons “delivered” to schools are on the rise, and there has been an increasing number of cases where local governments and educational institutions collaborate with companies in providing such lessons. We will continue to deliver safety and security by engaging in awareness and educational activities for disaster readiness through our Disaster Prevention Lessons.*

<https://www.tokiomarinehd.com/en/sustainability/theme1/disaster.html#anc5>

**Planned Activities**

*Tokio Marine Group plans to continue the above activities for supporting customers to properly respond to climate change in fiscal 2019.*

PRINCIPLE 7 - ENHANCE REPORTING	
<p><b>7.1 Submission against the ClimateWise Principles.</b></p>	<p><b>Submission</b></p> <p><i>TMNF submitted ClimateWise Report 2019 associated with all ClimateWise sub-principles on July 20, 2019.</i></p>
<p><b>7.2 Public disclosure of the ClimateWise Principles as part of our annual reporting.</b></p>	<p><b>ClimateWise-related Disclosures</b></p> <p><i>Please see Tokio Marine Group’s ClimateWise-related disclosure in our Sustainability Report 2018.</i></p> <p><a href="https://www.tokiomarinehd.com/en/sustainability/group_csr/evaluation/index.html">https://www.tokiomarinehd.com/en/sustainability/group_csr/evaluation/index.html</a></p> <p><b>TCFD-related Disclosures</b></p> <p><i>Please see Tokio Marine’s climate-related disclosures in our Sustainability Report 2018.</i></p> <p><a href="https://www.tokiomarinehd.com/en/sustainability/governance/low_carbon.html">https://www.tokiomarinehd.com/en/sustainability/governance/low_carbon.html</a></p> <p><i>Please see “Climate-related Disclosures Based on the Standards of the Task Force on Climate-related Financial Disclosures” on Page 54 in Tokio Marine’s Integrated Annual Report 2018.</i></p> <p><a href="https://www.tokiomarinehd.com/en/ir/library/annual_report/h10q7e000000l3tj-att/Integrated_Report_18E.pdf">https://www.tokiomarinehd.com/en/ir/library/annual_report/h10q7e000000l3tj-att/Integrated_Report_18E.pdf</a></p> <p><b>Planned Activities</b></p> <p><i>Tokio Marine Group plans to disclose the ClimateWise Principles and Report on its corporate website in fiscal 2019.</i></p>