

August 3, 2017  
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### Tokio Marine Group achieved “Carbon Neutral” in Fiscal 2016

Tokio Marine Holdings, Inc. (President and Group CEO: Tsuyoshi Nagano, hereinafter “TMHD”) achieved “carbon neutral\*1” in the Group’s overall business activities as of the end of fiscal 2016 for four consecutive years.

A group subsidiary Tokio Marine & Nichido Fire Insurance Co., Ltd. (hereinafter “TMNF”) has been “carbon neutral” in its domestic business operations since fiscal 2009. As a significant step forward, Tokio Marine Group as a whole achieved “carbon neutral” in its domestic and overseas business operations in fiscal 2011 for the first time and in fiscal 2013, 2014, 2015 and 2016 for four consecutive years. Tokio Marine Group will continue to promote initiatives for reducing environmental footprint and achieving “carbon neutral”.

\*1 “Carbon neutral” state means that CO<sub>2</sub> emitted in the course of business activities is equivalent to the volume of CO<sub>2</sub> removed or reduced by way of use of natural energy, the retirement of carbon credits and mangrove tree planting.

#### **1. Achieving “Carbon Neutral”**

In undertaking efforts to reduce environmental footprint and achieve “carbon neutral” across the entire Group (domestic and overseas operations), Tokio Marine Group (1) promotes energy conservation and energy efficiency, (2) plants mangrove trees to absorb and stabilize CO<sub>2</sub>, (3) uses natural energy such as green power (electricity), and (4) retires emission credits.

Thanks to these efforts, the Tokio Marine Group was able to offset CO<sub>2</sub> emissions from the Group’s overall business activities (domestic and overseas) in fiscal 2016 through the absorption and stabilization effects of mangrove tree planting and the use of natural energy (purchase of Green Power Certificates).

The Mangrove Planting Project was initiated by TMNF in 1999, and as of the end of March 2017, mangroves had been planted via the project encompassing approximately 10,103 hectares (equivalent to approximately 29.6 times the area of Central Park in New York City) in a total of nine countries in Southeast Asia (Indonesia, Malaysia, Myanmar, the Philippines, Thailand, Vietnam), South Asia (Bangladesh, India) and Fiji.

Mangrove trees planted in these regions help (1) inhibit and alleviate global warming by absorbing and stabilizing CO<sub>2</sub>, (2) conserve biodiversity, (3) reduce disaster damages to coastal communities from tsunamis and storm surges, and (4) bring economic benefits that include increased catch in commercial fishery and local employments.

As regards Green Power, Philadelphia Insurance Companies purchased green power certificates which is equivalent to meet 100 percent of the annual electricity usage in their business operations and achieved "net zero emissions\*2" from fiscal 2013.

\*2 "Net zero emissions" state means that CO2 emitted and energy usage is net zero.

**2. Overview of "Carbon Neutral" Status for Fiscal 2016**

- (1) Scope: All business activities of TMHD and its consolidated subsidiaries (in and out of Japan).
- (2) Activities: Energy usage (electricity, gas and others) associated with facilities, vehicle and aircraft usage associated with business activities.
- (3) Results: CO2 emissions: 119,420 tons < CO2 removal: 163,459 tons

CO2 emissions: 119,420 tons		
Scope 1 (Direct)	Gas, gasoline and other fuels	14,916 tons
Scope 2 (Indirect)	Electricity and others	76,037 tons
Scope 3 (Other)	Business travel (Air travel) and others	28,467 tons

CO2 removal: 163,459 tons		
CO2 removal through mangrove trees	Planting in nine countries in Southeast Asia, etc.	160,000 tons
Use of natural energy	Green power certificate (wind power)	3,459 tons

Notes:

- Business air travel of the scope 3 is computed with data covering 75.1% (employee base) of the entire Group.
- Ernst & Young ShinNihon LLC provided Independent Assurance Report on information such as CO2 emissions from energy sources and Green power certificate. TMHD requested Central Research Institute of Electric Power Industry of the evaluation and calculation of CO2 removal through mangrove trees and received the evaluation report. Furthermore, a third-party organization (Ernst & Young ShinNihon LLC) has been contracted to provide verification of the results of the calculations in terms of confirming consistency in part of the calculation process. As a result, the Tokio Marine Group has deemed that the effects of CO2 absorption and fixation through mangrove planting have been calculated appropriately.
- CO2 emission calculation for organizational boundaries, activities boundaries, method of calculation and CO2 emission factors refer to "ISO14064-1" and the "Mandatory Greenhouse Gas Accounting and Reporting System" based on the "Act on the Promotion of Global Warming Countermeasures (Global Warming Countermeasures Law)." "Removal through mangroves" refers to the methodology of the clean development mechanism (CDM) of using forest sink to store CO2.