

Responding to the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

Yokohama has identified climate change mitigation and adaptation as an important management issue for contributing to a sustainable society and ensuring sustainable corporate growth, and expressed its support for the recommendations of the TCFD* in January 2022. Going forward, we will actively disclose information related to our action on climate change in line with the TCFD recommendations.

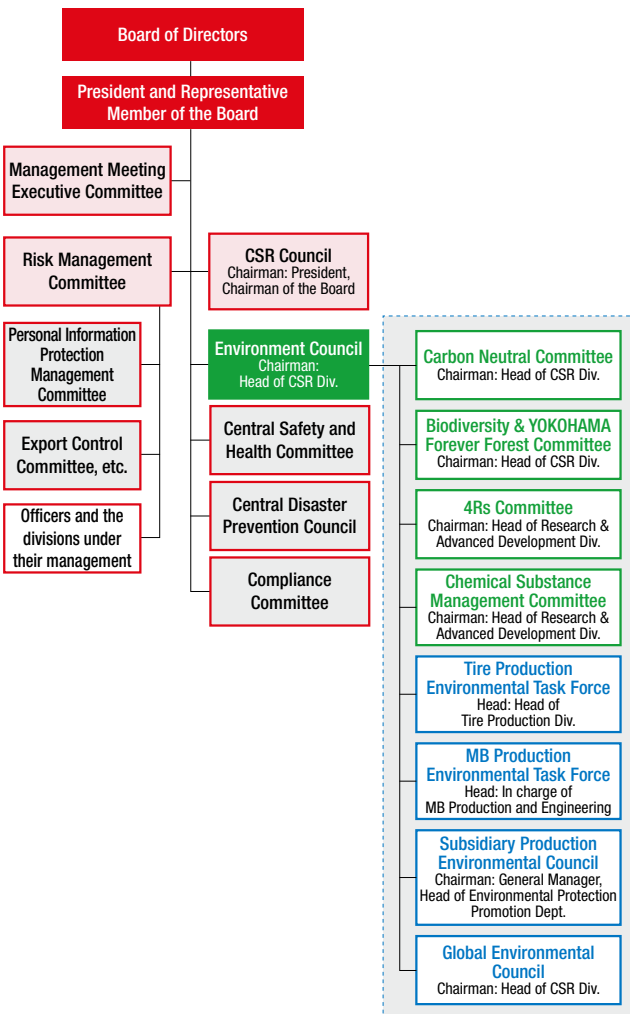


* TCFD stands for Task Force on Climate-related Financial Disclosures. The TCFD was established in 2015 following a request from the G20 for the Financial Stability Board (FSB) to consider climate-related disclosures and actions to be taken by financial institutions. The TCFD recommends that companies and other organizations evaluate and disclose the financial impact that climate-related risks and opportunities have on management.

Governance

The CSR Council, which is chaired by the President, Chairman of the Board, convenes twice a year (in May and November), and is positioned to draft and consider challenges related to climate change mitigation and adaptation, as well as other CSR challenges to be tackled by the Yokohama Group. Regarding climate change mitigation and adaptation, an Environment Council has been established. Environmental activities are pursued with the establishment of two task forces, two councils and four committees as subordinate bodies to the Environment Council. With an officer in charge (head of the CSR Div.) as its chairperson, the Environment Council deliberates and makes decisions regarding various issues such as carbon neutrality and oversees the environmental activities of the Yokohama Group.

Climate Change-Related Governance Support System



Strategy

We have classified climate-related risks into two categories, specifically risks associated with the transition to a low-carbon economy (transition risks) and risks associated with the physical impacts of climate change (physical risks). We have also assessed the magnitude of the financial impacts to be affected and summarized the risks and opportunities for our business. In addition, we conducted scenario analysis using the scenarios presented by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC) regarding temperature increase, and examined adaptation measures and financial impacts based on the risks and opportunities of the 1.5°C and 4°C scenarios, respectively. We will continue to examine risks and opportunities and refine our scenario analysis.

Major Risks and Opportunities Related to Climate Change

	Material Factors	Category	Potential Financial Impact	Impact	
Risks	Transition to a decarbonized society	Policy and Regulations	Introduction and rise of carbon pricing	Large	
		Markets	Resource (raw material) price hikes and supply instability	Large	
			Increase in renewable energy and fuel prices (crude oil, natural gas)	Large	
		Technology	Capital investment to improve manufacturing process efficiency	Medium	
		Reputation	Impact on customer evaluation of emission reduction efforts and stance, and on stock prices Response to the global movement to promote the use of renewable energy (reputation among stakeholders)	Small	
	Physical risks	Change in demand for products and services	Markets	Product selection based on evaluation of CO ₂ emissions during manufacturing (competition within the same products)	Large
		Response to changes in the automotive industry	Markets	Decline in car sales due to MaaS	Large
		Intense weather disasters due to rising temperatures	Acute	Raw material procurement difficulties and higher procurement costs due to supply chain disruptions	Large
				Equipment damage or shutdown due to extreme weather	Large
		Intense climate change	Chronic	Depletion of natural rubber (natural resources) due to climate change, making procurement difficult	Large
Decline in demand for winter tires due to reduced snowfall, etc. Increased R&D investment required to improve product performance	Medium				
Opportunities	Transition to a decarbonized society	Energy Sources	Reduce energy costs by improving manufacturing process efficiency	Medium	
		Products and Services	Increase market share by responding quickly to changes in demand (carbon neutral compliance and performance requirements for electric vehicle (EV) installation) and stricter regulations.	Large	
	Change in demand for products and services	Products and Services	Improve competitiveness and profitability by offering environmentally friendly products using renewable/recycled raw materials and fuel-efficient, low-carbon products	Large	
	Response to changes in the automotive industry	Products and Services	Increased demand for products and services that support next-generation mobility (CASE and MaaS compliance, new business opportunities through hydrogen utilization)	Large	
	Climate change	Products and Services	Increased demand for products and services that contribute to disaster prevention, recovery, temperature change, food and nature (e.g., tires, oil fenders, etc., which contribute to crop/forest growth)	Large	

■ Summary of Scenario Analysis Results

Scenario Conditions		1.5°C Scenario	4°C Scenario
Scenario Overview		Limit the increase in the global average temperature to 1.5°C above pre-industrial levels by 2100 through stringent climate policies and technological innovation for sustainable development.	Failure of strict climate policies and technological innovation, and rapid intensification of the physical effects of climate change, resulting in a 4°C increase in average temperature by 2100 relative to pre-industrial levels.
Reference Scenario	Transition Risk	IEA Net Zero Emissions by 2050 Scenario (NZE)	IEA World Energy Outlook 2021 (WEO2021)
	Physical Risk	IPCC 6th Report SSP1-1.9	IPCC 6th Report SSP5-8.5
Analysis Results		Mainly transition risks/opportunities are manifested. [Risks] Increased energy cost burden and capital investment to improve manufacturing process efficiency due to the need to comply with strict climate change regulations, procurement of renewable energy and introduction of carbon pricing Increased R&D and procurement cost burdens for renewable/recycled raw materials due to the increase in the number of products with reduced environmental impact [Opportunities] Competitiveness and profitability will be enhanced through carbon neutral compliance, early response to EV-mounted performance requirements, and provision of environmentally friendly, fuel-efficient, and low-carbon products	Mainly physical risks/opportunities manifested. [Risks] Increased occurrence of serious natural disasters at bases and in the supply chain. In addition, extreme weather conditions will deplete natural resources, making raw material supplies unstable. Product demand changes due to chronic climate change, such as lower demand for winter tires due to reduced snowfall, etc. [Opportunities] Increased demand for products and services for disaster prevention, recovery, and temperature fluctuations

■ Risk Management

Regarding risks related to climate change, subordinate organizations to the Environment Council, including the Carbon Neutrality Promotion Committee and other task forces, councils and committees identify and assess each risk and engage in activities to mitigate them. For the material risks identified by each task force, council or committee, the Environment Council deliberates and decides on countermeasures. For physical risks such as natural disasters, the Central Disaster Prevention Council is working on disaster prevention and BCP and promoting risk reduction. Matters of great seriousness and urgency are deliberated by the Risk Management Committee (chaired by the head of the Corporate Administration Div.), which was established to strengthen our defensive posture against the various risks that surround Yokohama and are appropriately evaluated and handled. The activities of the Risk Management Committee are regularly reported to the Board of Directors.

■ Metrics and Targets

Yokohama has declared three medium-to-long-term targets regarding its environmental activities, namely carbon neutrality, circular economy and co-existence with nature, in order to minimize the risks related to climate change.

■ Medium-to-Long-term Environmental Target

Carbon Neutrality	<ul style="list-style-type: none"> Reduce CO₂ emissions from company activities by 38% by 2030 compared to fiscal 2013 Achieve net zero CO₂ emissions (carbon neutrality) in our activities by 2050
Circular Economy	<ul style="list-style-type: none"> At least 30% renewable/recycled raw material usage by 2030 100% sustainable raw materials usage by 2050
Coexistence with Nature	Cumulative 1.3 million trees planted and saplings provided by 2030 as part of Forever Forest activities

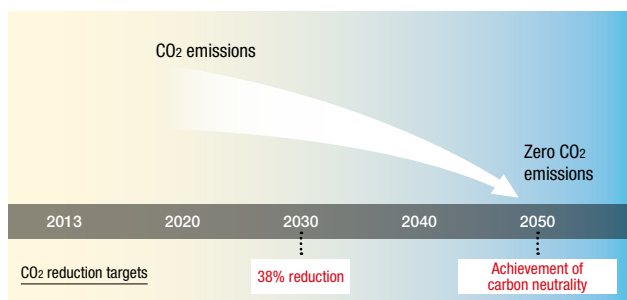
In addition, the results of various metrics, including GHG emissions, water usage, waste volume, the Yokohama Forever Forest and biodiversity conservation activities are disclosed on the Yokohama CSR website. Please refer to the below link for data.

WEB

■ Progress on Material Initiatives
<https://www.y-yokohama.com/global/csr/materiality/#04>



■ Roadmap to Carbon Neutrality by 2050



■ Roadmap to a Circular Economy

