

# **Information Disclosure Based on TCFD Recommendations**

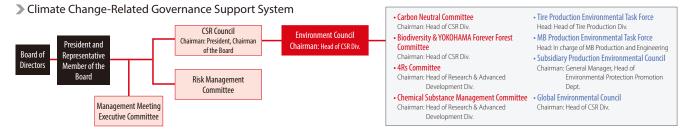
Relevant material issue	Initiatives		
Products	<ul> <li>Manufacture and sell tires and industrial materials with high levels of safety, quality, and environmental performance</li> <li>Manufacture and sell carbon neutral products</li> </ul>		
The Earth	<ul> <li>Achieve carbon neutrality in our own activities by 2050</li> <li>Sustainable material usage rate of 100% by 2050</li> </ul>		

In recent years, the effects of climate change have become more serious around the world, and companies are required to proactively respond to climate change through decarbonization and other efforts. The Group 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 proactively disclose information related to climate change efforts in line with TCFD recommendations.

> \* 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 could have on management.

# Governance

The CSR Council, which is chaired by the President and Chairman of the Board, convenes twice a year (in May and November), and is positioned to draft and consider CSR challenges to be addressed by the Yokohama Rubber Group. Regarding climate change mitigation and adaptation, the Environment Council was established, with environmental activities promoted through the establishment of two task forces, two councils, and four committees as bodies subordinate to the Environment Council. With an officer in charge (head of the CSR Div.) as the chairperson, the Environment Council deliberates and makes decisions regarding various issues and oversees the environmental activities of the Yokohama Rubber Group.



# Strategy

We have classified climate-related risks into two specific categories, 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 resulting financial impacts and summarized the risks and opportunities for our business. In addition, we conducted an analysis using

# **Risk Management**

Regarding risks related to climate change, bodies subordinate to the Environment Council, including the Carbon Neutral Committee and other task forces, councils, and committees identify and assess each risk and engage in activities to mitigate them. For 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 engaged in scenarios presented by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC) regarding temperature increases, and examined adaptation measures and financial impacts based on the risks and opportunities of the 1.5°C and 4°C scenarios, respectively. Going forward, we will continue to examine risks and opportunities and refine our scenario analysis.

disaster prevention, 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 surrounding Yokohama Rubber and ensure appropriate evaluation and responses. The activities of the Risk Management Committee are regularly reported to the Board of Directors.

### > Major risks and opportunities related to climate change

		Material factors	Category	Potential financial impact	Financial impact	Future countermeasures
Risks Ticle-		<b>—</b>	Policies and regulations	Introduction and rise of carbon pricing	Large	Formulate and implement a roadmap to carbon neutrality     Promote "activities to reduce energy consumption by 1% per year" (improve     equipment efficiency, optimize operations, review processing specifications, etc.)     Expand use of renewable energy     Introduce new energy technologies
			Markets	Resource (raw material) price hikes and supply instability	Large	
	s			Increase in renewable energy and fuel prices (crude oil, natural gas)	Large	
	isk		Technologies	Capital investment to improve manufacturing process efficiency	Medium	
	tion r		Reputation	Impact on customer evaluation of emission reduction efforts and stance, and on stock prices	Small	
	ransi			Response to the global movement to promote the use of renewable energy (reputation among stakeholders)	Small	
	F	Change in demand for products and services	Markets	Product selection based on evaluation of CO <sub>2</sub> emissions during manufac- turing (competition within the same products)	Large	Promote carbon neutral manufacturing sites to achieve zero CO <sub>2</sub> emissions during production
		Response to changes in the automotive industry	Markets	Decline in car sales due to MaaS	Large	• Explore commercial tires enhancements, costs, services, and DX
	risks	Intensification of weather disasters due to	Acute	Raw material procurement difficulties and higher procurement costs due to supply chain disruptions	Large	Diversify suppliers and raw material production sites     Strengthen manufacturing sites against windstorms, floods, and earthquakes, formulate BCP
		rising temperatures		Equipment damage or shutdown due to extreme weather	Large	
	Physical	Intensification of climate CI change	a .	Depletion of natural rubber (natural resources) due to climate change, making procurement difficult	Large	Strengthen sustainable raw materials research and development
	Ph		Chronic	Decline in demand for winter tires due to reduced snowfall, etc.	Large	Develop and launch sales of all-season tires
				Increased R&D investment required to improve product performance	Medium	Promote joint R&D with business partners
		Transition to a	Energy sources	Reduce energy costs by improving manufacturing process efficiency	Medium	Promote "activities to reduce energy consumption by 1% per year" (improve equipment efficiency, optimize operations, review processing specifications, etc.)
Opportunities	n	decarbonized society	Products and services	Increase market share by responding quickly to changes in demand (car- bon neutral compliance and performance requirements for electric vehi- cle (EV) installation) and stricter regulations.	Large	Increase installation of EV-compatible tires on new vehicles     Expand sales of "E+" mark EV-compatible tires
		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-effi- cient, low-carbon products	Large	Expand sales of tires and rubber products using renewable/recycled raw materials     Expand sales of fuel-efficient tires with superior environmental performance     Expand sales of tires and rubber products with zero CO2 emissions during manufacturing
	20	Response to changes in the automotive industry	Products and services	Increased demand for products and services that support next-genera- tion mobility (CASE and MaaS compliance, new business opportunities through hydrogen utilization)	Large	Sell sensor tires (IoT tires)     Strengthen tire solution services
		Climate change	Products and services	Increased demand for products and services that contribute to disaster prevention, recovery, temperature change, food and nature (for example, tires and other products that contribute to crop and forest growth)	Large	Expand sales of off-highway tires (OHT)     Expand sales of rubber products such as conveyor belts that are highly resistant to impacts and heat

## Summary of scenario analysis results

Scenario Conditions		1.5°C Scenario	4°C Scenario		
Scenario overview		Limits the increase in global average temperature to 1.5°C above pre-industrial levels by 2100 through stringent climate policies and technological innovations 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	Transition risks	IEA Net Zero Emissions by 2050 Scenario (NZE)	IEA World Energy Outlook 2021 (WEO2021)		
scenarios	Physical risks	IPCC 6th Report SSP1-1.9	IPCC 6th Report SSP5-8.5		
		Mainly transition risks/opportunities are manifested.	Mainly physical risks/opportunities are manifested.		
Analysis results		[Risks] Increased energy costs and capital investment to improve manufacturing process efficiency required to comply with strict climate change regulations, renewable energy procurement, and the introduction of carbon pricing Increase R&D and procurement costs for renewable/recycled raw materials due to an increase in the number of products with lower environmental impact [Opportunities] Competitiveness and profitability enhancements through carbon neutral compliance, early response to EV-mounted performance requirements, and provision of environmentally friendly, fuel-efficient, and low-carbon products	[Risks] Increased occurrence of serious natural disasters at manufacturing sites and in the supply chain; Extreme weather conditions may also deplete natural resources, causing raw material supply instability Product demand fluctuation due to chronic climate change, including lower demand for winter tires due to reduced snowfall, among other factors [Opportunities] Increased demand for products and services compliant with disaster preven- tion, recovery, and temperature fluctuations		

#### Metrics and Targets

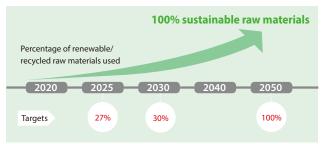
**Metrics and Targets** 

https://www.y-yokohama.com/global/sustainability/environment/tcfd/#indicators\_and\_targets

Yokohama has declared three medium-to-long-term targets for its environmental activities, carbon neutrality, circular economy and co-existence with nature, to minimize risks related to climate change. In addition, the results of various metrics, including GHG emissions, water usage, waste volume, and YOKOHAMA Forever Forest and biodiversity conservation activities are disclosed on the Yokohama Sustainability website. Please use the link below to view data.

⇔ P.56 Medium-to-Long-term Environmental

#### > Roadmap to a circular economy



#### Roadmap to carbon neutrality by 2050

