

# **INTEGRATED REPORT 2023**

# **CREATING VALUE FOR PEOPLE**



# Aiming to Enrich More People's Lives and Contribute to Their Greater Happiness and Well-Being

Yokohama Rubber established its corporate philosophy in 1992.

It consists of the Basic Philosophy, Management Policies,

Action Guidelines and Corporate Slogan.

The Basic Philosophy embodies the types of business where

Yokohama Rubber commits itself in all activities.

The Management Policies outline basic administrative principles for

upper-level management to commit themselves to.

The Action Guidelines are the code of conduct for each employee to comply with.



#### MANAGEMENT POLICIES

advanced technology to the creation of beneficial products.

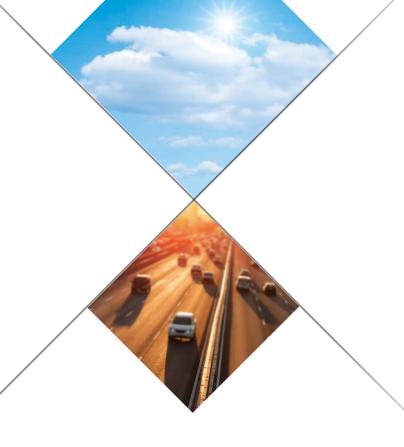
- Take on the challenge of new technologies to produce new value.
- Develop proprietary business fields to expand the scope of business.
- Create a workplace that values, improves and energizes people.
- Deal fairly with society and value harmony with the environment.

#### **ACTION GUIDELINES**

- Develop ourselves so that we may give our personal best.
- Trust, challenge and improve one another.
- Nurture a welcoming, open spirit.

#### **CORPORATE SLOGAN**

Excellence by nature



#### **Editorial Policy**

To give all stakeholders including shareholders and investors a proper understanding of the Yokohama Rubber Group's management strategies and business activities in general, we believe it is important to systematically identify and explain non-financial information such as society the environment human resources and corporate governance in addition to financial information such as results, business overviews and management strategy. Based on this approach, we have endeavored to further enhance and integrate non-financial information, and starting last year have consolidated our annual report and CSR report into an integrated report. During the editing process, we have made use of reference sources including the International Integrated Reporting Framework from the IFRS Foundation and the Guidance for Collaborative Value Creation from the Ministry of Economy, Trade and Industry, among other materials, as well as have made every effort to compile the report in a way that places an emphasis on the perspective of stakeholders.

Through this report, we hope to provide even more stakeholders with a deeper understanding of the Yokohama Rubber Group.

#### Reporting scope

The Yokohama Rubber Co., Ltd. and Consolidated Subsidiaries

#### Reporting period

January 1, 2022 to December 31, 2022

\* Information includes some activities which were conducted in or after January 2023

#### Month of issue

October 2023

#### **Cautionary Note Regarding Forward-Looking Statements**

This report contains statements on the Yokohama Rubber Group's projections, targets, plans, strategies and other matters related to the future. These statements are based on determinations made from available information at the time this report was published. Be aware that the actual performance and other metrics may differ from these forward-looking statements due to a variety of factors.

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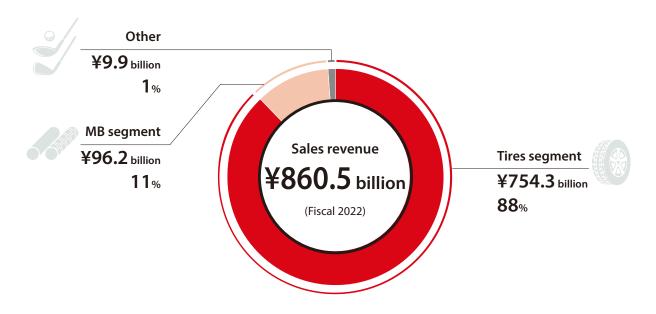
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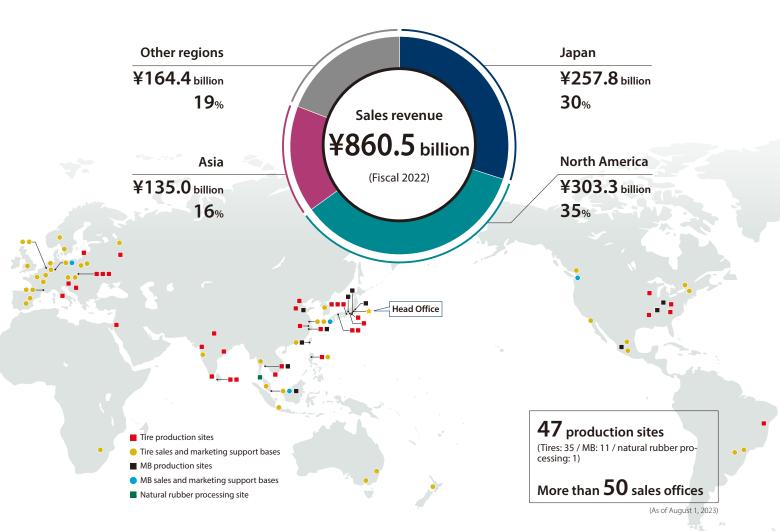


# At a Glance

#### Sales Revenue by Business Segment



#### Global Expansion (Sales Revenue by Region)





Yokohama Rubber develops and manufactures high quality tires used in almost every aspect of our world, from tires for passenger cars for everyday use, truck and bus tires supporting people's mobility and logistics, tires for construction and mining vehicles at work on construction sites and in resource development, tires for industrial machinery to tires for agricultural and forestry machinery.

#### **Consumer Tire Business**



In the Consumer Tire Business, we develop, manufacture and sell high value-added tires for passenger cars, meeting diverse needs of drivers.

#### ADVAN Sport viii



ADVAN, Yokohama Rubber's global flagship tire brand

## Strengths and competitive advantages

Proprietary technology, quality, product performance, product lineup and global sales network

#### Customers

Car makers and drivers

#### **Commercial Tire Business**



In the Commercial Tire Business, we develop, manufacture and sell tires for trucks, buses, construction, mining and industrial machinery, and agricultural and forestry machinery.

#### BluEarth 7110



BluEarth 711L, low-fuel-consumption and performance-oriented all-season tire for trucks

# Strengths and competitive advantages

Proprietary technology, quality, durability, product lineup, cost competitiveness, global sales and service network

#### Customers

Vehicle makers (truck and bus, construction, mining and industrial machinery, and agricultural and forestry machinery) and companies



We also carry a broad range of other products including hydraulic hoses for construction vehicles and various machine tools, automotive hoses, conveyor belts, marine products and aerospace products. Yokohama Rubber has played a significant role around the world for many years contributing to the development of a host of industries, including automobiles, petroleum, gas, mining, construction and aviation.





Hydraulic hoses used in construction machinery

# Strengths and competitive advantages

Proprietary technology, quality, product performance, product lineup and global sales network

#### Customers

Manufacturers (automobiles, construction machinery, machine tools, aircraft, etc.), petroleum, steel and other industries



In other business, we manufacture and sell golf gear under the PRGR (Pro Gear) brand.





RS JUST series for athlete golfers

advantages

Proprietary technologies, innovative ideas and analyzing hitting data at directly operated stores

Strengths and competitive

#### Customers

Golfers around the world

# Brands Supporting Yokohama Rubber's "Exploitation" and "Exploration"



#### **Consumer Tires**

With the aim of maximizing the sales ratio of high-value-added tires, we are making efforts in three categories: ultra-high-performance tires, tires for SUVs and pickup trucks, and winter tires. We are actively developing products, with a main focus on high-value-added tires for ADVAN, GEOLANDAR, and winter tire lineups.



ADVAN is a global flagship tire brand delivering a high level of driving performance by bringing out the full potential of passenger cars.

GEOLANDAR is a brand of tires for SUVs based on the concept of "driving freely on all roads and terrain across the planet." The iceGUARD brand of winter tires offers a wide selection of products, as well as unique compound and design technologies of tread pattern realizing high performance on ice and spour.

The BluEarth brand of fuel-efficient tires balances basic performance with enhanced fuel efficiency, wet surface and anti-wear features, making it suitable for a wide range of uses, from city driving to leisure activities.

#### **MB** (Multiple Business)





#### **Commercial Tires**

We provide a wide range of tires, including tires for trucks and buses and off-highway tires for construction and industrial vehicles, and for agricultural and forestry equipment. As one of the world's leading commercial tire specialists, we contribute to improving safety and productivity on the most demanding worksites.



This brand of tires for trucks and buses provides economic efficiency through superior fuel economy, while at the same time providing excellent basic performance in terms of durability and safety, and realizing environmental friendliness and improved transportation efficiency.

Off-highway tire brands comprise product lineups in all categories, from basic and standard, to premium, providing powerful traction support for vehicles used on agricultural, mining, and construction sites, and in other locations.

#### **PRGR (Pro Gear) Business**



# **Pioneering History**

Yokohama Rubber's history of over 100 years is also a history of pioneering, leading the times with pride as a manufacturer and strong ambition as a challenger. For the next 100 years, we will continue to contribute to solving social issues through our business activities by carving out unique areas through the creation of new value.

#### Strengthening of the Management Base

#### I 1917 Established.

#### 11952

Completed Phase 1 of the Hiratsuka Plant in Kanagawa Prefecture and started production there of belts, large tires, and vinyl products.



#### I 1961

11969

company.

Completed construction of the new corporate headquarters, the Yokohama Rubber Building.



#### I 1974

Started operations at the Ibaraki Plant.

Started production of high-pressure hoses.



#### I 1986

Built the D-PARC comprehensive tire proving ground in Ibaraki Prefecture.



#### **Business Transitions**

#### I 1954

I 1955

Launched the

HAMA SAFETY and HAMA

LINER, Japan's

first tubeless

Launched the Y-29, Japan's first snow tire.



I 1965
Launched sales of Unicon Belt, a commodity conveyor belt.

Established Yokohama Tire Corporation, a US tire sales

#### 1967

1960

Launched sales of G.T. SPECIAL, a radial tire for passenger cars (left photo). Launched sales of the Surge Series of high-pressure hoses (right photo).



#### 11971

Launched sales of G.T. SPECIAL STEEL, Japan's first steel radial tubeless tire.



#### 1978

Launched sales of ADVAN HF for passenger cars.

#### I 1987

1980

ADVAN racing tiresequipped car won the Japan Endurance Championship series for the third consecutive year.



	tires.			
Changes in Society	1950 Start of the Korean War.	1964 Start of the Tokyo Olympics.	1973 Oil crisis.	1983 Birth of the Internet.
Topics				
Plant Deve	pleted Hiranuma (Yokohama City). Poped Japan's corded tire.		●1978 Developed  Japan's first sports radial  tire, ADVAN HF.	• 1983 Launched sales of PRGR golf equipment. Photo shows a PRGR carbon driver.
Begai	pleted the Yokohama Plant. In production of the first domestically uced tire in 1930.	●1963 Introduced Japan's first radial tires for trucks and buses.		

1970

1917

1950

#### 11991

Completed R&D integrated center (RADIC) at the Hiratsuka Factory.



#### 11996

Established Yokohama Tire Philippines Inc., a tire manufacturing and sales subsidiary.

#### 12006

We aimed to become a company with top-level contributions to the environment with Environmental GD100 as our guiding principle, and enhanced our CSR management under our long-term management plan GD100.

#### 12009

Merged with domestic tire sales companies and established Yokohama Tire Japan Co., Ltd.

#### I 2016

Acquired the Alliance Tire Group B.V. (ATG), a Dutch company that manufactures and sells tires for agricultural and construction machinery.

#### 12017

Our 100th anniversary.



#### 12020

Selected for inclusion in two ESG stock indexes—the FTSE4Good Index Series for the 16th straight year and the FTSE Blossom Japan Index for the 4th straight year.

#### 12023

Acquired Trelleborg Wheel Systems Holding AB, a Swedish company that manufactures and sells tires for agricultural and industrial machinery.

#### 11990

Launched sales of SY101, a studless tire for trucks and buses.



#### 11994

Developed components for H-II rocket engines.



#### 12000

Launched sales of DNA dB, a fuel-efficient tire for passenger

#### 12009

Developed AIRTEX Advanced liner, enabling lighter weight tires.



#### 2011

Electric car equipped with BluEarth tires won the Pike's Peak Hill Climb in the U.S. in record time.



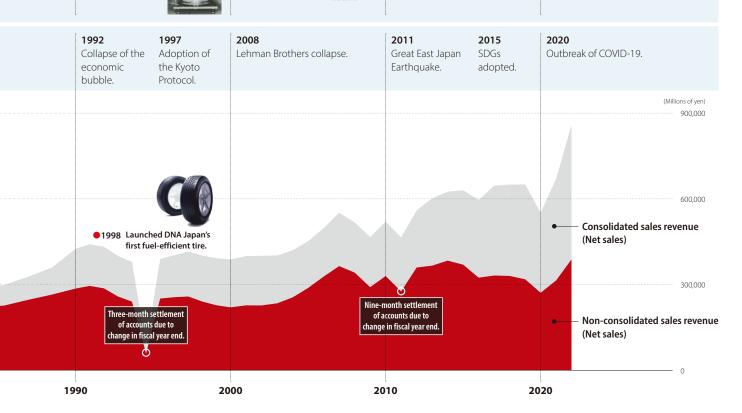
#### 12020

Launched sales of BluEarth-4S AW21, an all-season tire for passenger cars.



#### 12020

903W ultrawide-base studless tire for trucks selected for inclusion in Japan's Good Design Best 100.



# Helping transform the mobility industry by strengthening our presence in the OHT business

The off-highway tire (OHT) market is expected to grow in the future amid increased food production and the growth of logistics driven by economic development in global markets. In May 2023, the Yokohama Rubber Group acquired all shares of Trelleborg Wheel Systems Holding AB (TWS), turning it into a wholly owned subsidiary, with the aim of expanding earnings in the OHT business, which is expected to generate consistently high profits. Yokohama will make full use of TWS's advanced technological capabilities in the OHT market to tap into greater growth.

# Current market situation for commercial tires and our challenges

Considering the global tire market, the ratio of consumer tires to commercial tires is around 1:1, within a market scale of around ¥20 trillion. As CASE, MaaS, and DX become more widespread in the future, the number of privately owned cars is expected to decrease, while the number of infrastructure vehicles that support the movement of people and goods is expected to increase. The Yokohama Rubber Group has positioned the OHT business, which offers consistently high profits among commercial tires, as a growth driver and is focusing on business expansion.

The global OHT market was valued at \$30 billion in 2022 and is expected to grow at a compound annual growth rate (CAGR) of 6% from 2023 to 2027, reaching \$40 billion by 2027. This is due to continuous and stable growth in North America, the largest market, as

well as the growing need for residential construction due to the rapid population growth and migration to large cities in the Asia-Pacific region, as well as the expected growth of agricultural and mining industries worldwide.

With the acquisition of Trelleborg Wheel Systems Holding AB (TWS), the Yokohama Rubber Group aims to achieve sustainable growth by seizing growth opportunities and solving social issues, while optimizing its sales ratio of consumer tires and commercial tires from 2:1 currently to 1:1, in line with the global market.

# TWS: Leading manufacturer of tires for agricultural machinery and industrial vehicles

TWS, headquartered in Tivoli, Italy, is a leading manufacturer of tires

#### > After TWS joins: OHT product portfolio





for agricultural and industrial machinery with a history spanning more than 110 years, as it begun producing tires in 1909. Approximately 60% of its products are for agricultural machinery, about 20% for industrial vehicles, and the rest for construction vehicles and motorcycles. TWS boasts world-class product strengths, brand power, technical prowess, and service capabilities in agricultural machinery and industrial vehicles. In fiscal 2022, the company's net sales totaled 13,277 million Swedish kronor (approximately ¥172.5 billion), and over the past decade, its net sales and EBIT have more than tripled.

#### Strengthening the Yokohama Rubber Group's ability to help transform the mobility industry through the acquisition of TWS

#### **Expanding product portfolio**

The acquisition of TWS renders the brand lineup of tires for agricultural machinery and construction vehicles complete in all categories, from basic to standard and premium. This enables the Yokohama Rubber Group to better respond to sales channels and increase its resilience to economic fluctuations.

#### **Global network covering major markets**

TWS has 14 production bases in nine countries: in Europe in Italy, the Czech Republic (3 bases), Latvia, Serbia, Slovenia; in North America in the United States (2 bases); in South America (Brazil); in Asia (China (2 bases), and Sri Lanka (2 bases)), with Europe accounting for about 60% of the company's sales. By adding TWS's strengths in Europe to the Group's strengths in Japan, North America and Asia, the Yokohama Rubber Group will be able to build a global network that covers major markets, and anticipates greater growth.

In terms of services, Yokohama Rubber will expand TWS's proprietary tire maintenance services for industrial vehicle tires currently offered at 83 bases in 21 countries around the world to include tires for agricultural machinery and construction vehicles.

#### Use of DX

TWS is developing remote monitoring systems for air pressure and tire temperature, similarly to Yokohama Rubber. Its Adaptive Tire Management System (ATMS) improves agricultural productivity by detecting working conditions such as load, pressure, and temperature in real time and constantly suggesting the optimal tractor vehicle settings. Its Tire Pressure Management System (TPMS) developed for construction and port vehicles constantly monitors air pressure and temperature to improve operational efficiency and ensure operator safety. The combination of TWS's and Yokohama Rubber's DX knowledge will promote the provision of more convenient and efficient services.



TPMS: Digital tool for construction/port

ATMS: Real-time tire data for ultimate tractor

#### **Future** issues and responses

Going forward, the Yokohama Rubber Group will need to maximize synergies from the TWS acquisition, and it is now implementing a PMI program toward this end. Specifically, utilizing the bases of both companies, the Group will work to further grow the OHT business by combining its strengths with TWS's in all areas, such as building optimal production, sales, service, and quality assurance systems that meet the needs of each region, combining our R&D knowledge to create new tire products and services, and strengthening sustainability initiatives such as utilizing sustainable materials.



# **Message from the President**



## Using the principles of "offense and defense" as a guideline for management

Since becoming President of Yokohama Rubber in 2017, I have been asked a lot about my motto. In such cases, I always try to answer "play offense and defense (Sogyo Shusei)."

The term "Sogyo Shusei" is found in the "The Essentials of Governance" by Emperor Taizong of the China's Tang Dynasty which contains exchanges between the emperor and his ministers. The term questions whether it is more difficult to establish a new country or to protect it, but I think it raises an essential issue that is also common to modern management, even though it was written about 1,400 years ago. In management, if we interpret "Shusei" (defense) as internal improvements for business continuity and "Sogyo" (offense) as a growth strategy, which is more important? I find that both are equally important, and I believe that we cannot survive in the market unless we promote them at the same time.

In order for a company to grow sustainably, it must pursue both

increased sales and profits in terms of performance, and investments in growth areas made possible by profits. It is naturally important to carry out existing business activities steadily. On the other hand, it is also important to establish ("Sogyo") a business and create new value by innovating it in anticipation of drastic changes in the environment. They are not separate, but complementary.

While making a solid profit from existing businesses and securing cash flow, we will establish ("Sogyo") new businesses using that cash. The strategy of creating and expanding business domains through M&A and other means is also part of the founding ("Sogyo") process. I believe that only by continuing to implement these approaches will we be able to achieve revenue growth. This way of thinking is the basis of my management philosophy, and I continue to put it into practice consistently as a principle in management.

# Transforming society and creating value with tires during a once in a century transformation Under the YX2023 Medium-Term Management Plan, we are promoting a shift in our business portfolio while expanding existing businesses and aggressively investing in growth. In 2023, the final year of the plan, we will achieve sales revenue of 1 trillion yen for the first time as the culmination of the past 100 years, and embark on a new path for the next 100 years.

#### **Promoting YX2023 strategies based on market changes**

In fiscal 2022, as the second year of our three-year medium-term management plan YOKOHAMA Transformation 2023 (YX2023) launched in 2021, we worked to further promote the plan based on the positive results of the first year.

The basic strategies are to pursue the "Exploitation" of strengths in existing businesses, and to promote "Exploration" to seek new possibilities in markets facing a once in a century transformation.

The current global tire market is valued at about ¥20 trillion, of which consumer tires such as passenger car tires and commercial tires such as tires for trucks, buses, and agricultural machinery each account for about half of the total. However, emerging trends such as Connected, Autonomous, Shared, Electric (CASE), Mobility as a Service (MaaS), and Digital Transformation (DX) are projected to reduce the number of privately owned vehicles and increase the demand for infrastructure vehicles. Furthermore, when comparing

our current situation with the global market, the composition ratio of consumer tires and commercial tires is 1:1 in the global market, while the same ratio for Yokohama Rubber is 2:1, showing bias towards consumer tires. As customer needs shift from individuals to corporations and consumer tires shift to commercial tires, we are strategically promoting initiatives by emphasizing two approaches: "Exploitation" of consumer tires and "Exploration" of opportunities in commercial tires.

In consumer tires, we are focusing on three categories of ADVAN ultra-high-performance tires, GEOLANDAR tires for SUVs and pickup trucks, and WINTER tires, with the aim of maximizing the high value-added tire sales ratio. Our goal is to boost profits by increasing the ratio of high value-added tires sold from 40% in fiscal 2019 to 50% or more.

In commercial tires, there is an urgent need to grow off-highway

Data Section

# >> Value Creation Journey

#### Message from the President

tires (OHT) in order to bring our overall composition closer to the market composition ratio and to increase profits. By adding Trelleborg Wheel Systems Holding AB (TWS), which we acquired in May 2023, to our tire business, we will not only optimize the overall revenue composition, but also make it a more profitable product mix compared to the market, and strengthen our commercial tire product lineup, cost, service, and DX.

Applying the aforementioned concept of "Sogyo Shusei," the expansion and strengthening of high-value-added products in consumer tires is regarded as defense ("Shusei") when it comes to the transformation of the Group's entire business portfolio. Through the acquisition of TWS, we will realize a full lineup within the OHT business at once and achieve non-continuous growth, which can be described as offense ("Sogyo") in regard to the business domain that will become our new strength.

#### Record high sales revenue and profits in fiscal 2022

In fiscal 2022, despite a challenging business environment marked by the ongoing situation in Ukraine, soaring raw materials prices and logistics costs, a reduction in automobile production due to the semiconductor shortage, surging energy costs due to inflation, and a sharp deterioration in business sentiment, sales revenue totaled ¥860.5 billion and business profit was ¥70.1 billion, setting new record highs for the second consecutive year following fiscal 2021. This strong performance is attributed to strong sales in North America and other regions as a result of efforts to expand sales of high-value-added products and OHTs for agricultural machinery in our mainstay tire business, improve the MIX, and raise prices in Japan and overseas. In addition, the yen's depreciation, which has continued since last year, also contributed to business performance.

# Accelerated shift of consumer tires to high value-added products

In consumer tires, we are working to expand original equipment (OE) use of ADVAN and GEOLANDAR on new vehicles, strengthen return sales in the replacement market, expand the product size lineup including winter tires, and strengthen sales measures tailored to each region. In fiscal 2022, a large number of luxury cars and EVs were equipped with ADVAN or GEOLANDAR tires. In addition, in the replacement market, we positioned fiscal 2022 as the "YOKOHAMA Summer Offensive"-themed year and worked to expand sales, focusing on new ADVAN products. As a result of these activities, the ratio of high value-added products reached 42% in fiscal 2022.

In fiscal 2023, we will continue to maximize the ratio of high value-added products. Under the theme of "Mud Match," we will strengthen sales of GEOLANDAR tires, launch new products, and expand the size lineup. We will also increase the ratio of high value-added products to 47% and seek to achieve the target of 50%.

ADVAN, which will celebrate its 45th anniversary in 2023, has always been used in racing since its inception. We will continue to carry out grassroots activities that literally support the feet of racing fans. The reason I decided to join the company was simple: I like cars and motorcycles. Motorsports is considered a grand testing ground for technological development, and through the supply of high-performance tires, we hope to showcase our "quality" and "fun to drive" attributes and strongly emphasize the presence of Yokohama Tire to fans and the market.

Our achievements in motorsports included the following. We won back the series championship for the first time in two years in the GT300 class of the 2022 SUPER GT. In the United States, a car with ADVAN tires has won the overall championship running at the 100th Pikes Peak International Hill Climb, and a car with GEOLANDAR tires won the overall victory in the Asia Cross Country Rally 2022. These stellar results both inside and outside of Japan show that Yokohama Rubber's technologies truly lead the field in motorsports and beyond.

Our tires, which have been highly evaluated around the world through these efforts, are now used in such iconic performance cars as Mercedes-Benz in its top-grade AMG and BMW M.

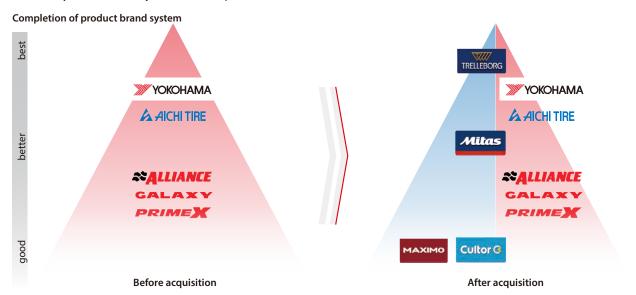
# In commercial tires, the growing OHT business posted substantial growth

One of our most significant achievements in fiscal 2022 was the acquisition of Trelleborg Wheel Systems Holding AB (TWS) in the OHT business, which is a growth driver.

In order to respond to business changes such as the increased demand for commercial tires, we acquired Alliance Tire Group (ATG) in 2016 and Aichi Tire Industry in 2017 to position our business for growth. Subsequently, in 2021, we integrated our OHT business with ATG and Aichi Tire Industry to form Yokohama Off-Highway Tires, and we are now working together to promote our growth strategy.

The TWS acquisition is a major acquisition with a different significance from previous acquisitions and business integrations. TWS is developing its global production and sales business of tires for agricultural machinery and industrial vehicles, mainly in Europe, Asia (including China), North America, and Central and South America. Estimates place its enterprise value at 2,074 million euro (using a

#### > OHT brand system after TWS joined the Group



performance-linked earn-out method) and EBITDA multiple at approximately 9.5 times. Particularly noteworthy are the company's premium brands.

To date, Yokohama Rubber OHT has significantly increased sales and profits, mainly for cost-competitive products made in India. In addition, the acquisition will add premium brand Trelleborg and standard brand Mitas to complete the good, better and best product lineup. In addition, as our production sites and sales channels are expanding around the world, our diverse lineup will provide greater stability against economic fluctuations. Moreover, by incorporating the maintenance and inspection services of premium brands and DX know-how into the Group, we can expect to improve the services of the entire Group. Eventually, we would like to unify our R&D system across the Group and incorporate advanced European knowledge in the environmental field.

Creating a large number of business synergies in this way and increasing the ratio of highly profitable OHT businesses will enable us to improve the stability of our business and further grow our sales

Furthermore, in order to meet the growing demand, the new plant in Visakhapatnam, India began operations ahead of schedule in

August 2022. In fiscal 2023, we will proceed with full capacity operation and the second phase of enhancements. In the truck and bus tire business, the Mississippi Plant in the U.S. has improved supply and production has reached a record high, and we are also investing in increasing production at the Mie Plant. Our production of small-diameter truck tires, for which demand is growing, and tires for regular trucks and buses will increase by more than 100,000 units. In Japan, we are actively supporting the transportation business using a next-generation tire management system (T.M.S) that utilizes IoT, and are promoting DX.

#### MB business focusing resources on growth businesses

In the MB (Multiple Business) business, we focused resources on our strengths in the Hose & Couplings business and Industrial Products business.

In the Hose & Couplings business, we decided to reorganize our automotive production systems in the United States and Mexico, and to increase production at the Ibaraki Plant, following our investment in increased production capacity at our Chinese plant for hydraulic hoses. Going forward, we will increase our production capacity for large-diameter products to seize demand.

#### Message from the President

In the Industrial Products business, as a result of efforts to maximize our domestic market share of conveyor belts, strengthen domestic sales, and expand the lineup of standard inventory, we achieved sales 1.5 times larger than the previous fiscal year and acquired a market share of about 50%. In order to further maximize our market share, we will continue to increase the production capacity of the Hiratsuka Factory.

In terms of structural reforms, in November 2021, we transferred the Hamatite business, which produces and sells adhesives and sealants, to Sika AG, headquartered in Switzerland, and in March 2022, we integrated the Aerospace Parts Division into the Industrial Materials Division

In fiscal 2023, in the Hose & Couplings business, we will increase the production ratio of automotive hoses in Mexico to 31% and strive to maximize the production capacity of hydraulic hoses at our plant in China. In the Industrial Products Business, we will continue to focus on maximizing our share of conveyor belts and plan to launch new products.

#### **Promoting sustainability management**

When applying "Sogyo Shusei" to management, the management foundation plays a particularly important role in defense ("Shusei"). We regard sustainability management as one of our practical business strategies to strengthen our business, and these efforts are leading to the sustainable improvement of corporate value through various activities from an environmental, social, and governance perspective.

Our corporate slogan is "Excellence by nature," and this phrase applies perfectly to environmental initiatives. Since we are a business that deals with natural rubber, we believe that it is our responsibility as a company to contribute to the sustainability of society. We have been working to protect the environment and reduce CO2 emissions from an early stage, and have been disclosing greenhouse gas emissions up to Scope 3 since fiscal 2013. In recognition of these efforts, we have been selected for inclusion in the FTSE4Good Index Series for 18 consecutive years and the FTSE Blossom Japan Index for six consecutive years.

In fiscal 2022, we further accelerated our activities in the environmental field, such as turning the Shinshiro-Minami Plant into a carbon-neutral model plant, researching and developing tires using sustainable materials, and working toward Nature Positive through the planting of the YOKOHAMA Forever Forest activities. Furthermore, in January 2023, we endorsed the philosophy of the Task Force on Nature-related Financial Disclosures (TNFD) and participated in the TNFD Forum, an international stakeholder organization that supports the establishment of a framework to encourage companies to disclose information on risks and opportunities related to the natural environment and biodiversity. Also in January, we joined the 30 by 30 Alliance for Biodiversity, a coalition launched by Japan's Ministry of the Environment and other organizations with the goal of conserving and protecting more than 30% of the land and sea by 2030.

Human capital is also a priority measure in YX2023, and through the formulation of the Human Rights Policy and personnel system reform in 2022, we are creating an organization that enables diverse human resources to demonstrate their abilities without being limited in their work styles. As part of these efforts, in March 2023, we integrated the Shimbashi Head Office and the Hiratsuka Factory. The aim of this integration is to break away from vertically divided operations by eliminating the physical distance between departments and to speed up decision-making from the perspective of total optimization. By creating an environment where business can be executed regardless of location or time, we will improve business efficiency and make decisions more quickly. In order to quantitatively grasp employee engagement for these initiatives, we plan to conduct an engagement survey this year.

We will strengthen governance and sell a portion of our cross-shareholdings, which have been considered to be high in the industry, and will continue to actively reduce them.

Diversity is one of our issues, but in fiscal 2022, we appointed a woman as an outside director and are working to increase this number one step at a time.

With the aim of strengthening the supervisory function of the Board of Directors, we transitioned our governance structure from a Company with an Audit & Supervisory Board to a Company with an Audit and Supervisory Committee on March 30, 2023. With the progress of business globalization, the proportion of foreign shareholders is also increasing, but we are still about 10% below the market average. In fiscal 2023, we will enhance effectiveness by strengthening our governance system, further improving these activities, and actively disclosing information in a fair and transparent manner.

#### Taking the next step after reaching ¥1 trillion in sales revenue for the first time

The current economic situation in Japan is recovering against the backdrop of increased production in the automobile industry and production machinery industry, mainly due to the improvement in the supply situation of semiconductors, and increased personal consumption and inbound tourism consumption, while raw material prices continue to climb. Overseas, capital investment has been slowing due to monetary tightening and the bankruptcy of some banks in the United States that surfaced in January. In Europe, while the situation in Ukraine shows no signs of improvement, financial system anxiety has erupted due to the bankruptcy of financial institutions in the United States, and high inflation continues to weigh on the economy.

Overall, the business environment remains challenging, but as I have explained so far, the Group has promoted a portfolio shift without exception in each business, and has decisively sold assets or allocated them to growth investments with an eye toward future business development.

Our investment policy is based on the cost of capital (WACC). When investing, we carefully select portfolio companies using the discounted payback period method, which determines whether the investment can be recovered within 10 years, and proactively raise funds through the sale of cross-shareholdings so that we can use our own funds as much as possible.

During YX2023, we sold our fixed assets at the Head Office and the Hamatite business in 2021, and sold cross-shareholdings in 2022. In 2023, we sold a tire wholesale subsidiary in the United States and have already sold cross-shareholdings on two occasions, resulting in a gain of ¥11.4 billion. Going forward, we plan to continue selling non-business assets such as cross-shareholdings, and use the cash obtained to repay loans and make new investments.

As a result of these initiatives, the further depreciation of the yen, the downward trend in ocean freight rates, and the completion of the acquisition of TWS, we expect both sales and profit to exceed fiscal 2022 and reach record highs in fiscal 2023. We expect to see sales revenue of ¥1 trillion and business profit of ¥84.5 billion, operating profit of ¥87.0 billion, and profit attributable to owners of the parent of ¥57.0 billion. Under the motto of stable dividends and consecutive dividends, we plan to increase dividends for the third consecutive year to ¥68 per share, paying out an interim dividend of ¥34 per share and a year-end dividend of ¥34.

In 2017, the 100th anniversary of Yokohama Rubber, we had set

targets of net sales of ¥1 trillion and operating profit of ¥100 billion, but unfortunately we fell short. This year, the final year of YX2023, we will achieve ¥1 trillion in sales revenue, which is the culmination of the past 100 years and could not be achieved in the Medium-Term Management Plan GD100 (Grand Design 100) from fiscal 2006 to fiscal 2017, and we will take the next step toward new growth.

As a company, various factors are necessary to ensure that we achieve increased sales and profits and continue to achieve profitable growth in a sustainable manner. To that end, it is necessary to appropriately utilize people, goods, and money. We will continue to take on the challenge of enhancing our corporate value over the next 100 years through appropriate investment and the creation of new value for our stakeholders. We will contribute to the creation of a sustainable society together with our stakeholders and grow as a company trusted by customers around the world.

I ask for your continued support and understanding as we move forward.



#### **Value Creation Process**

Basic Philosophy To enrich people's lives and contribute to their greater happiness and well-being by devoting our wholehearted energies and advanced technology to the creation of beneficial products

#### Social Change and Issues



#### Materiality



⇒ P. 20

#### Inputs



#### **Business Environment**

- Decrease in the number of privately owned vehicles and increase in the number of infrastructure-related vehicles due to the expansion of CASE and MaaS
- Distribution using electric vehicles and automation
- Intensifying price competition for tires

• Improvement of occupational health

and safety and prevention of infec-

Prevention of complicity in child and

forced labor in the company and

Social impacts on suppliers

**Environment** 

bases and suppliers

tainable resources

Climate change challenges

Changes in/impact on the natural

environment by our production

Dependence on natural resources

Switch from fossil resources to sus-

Changing values with regard to

Society

work styles

suppliers

# Products Deliver fun:

Deliver fun and peace of mind.



#### **People**

Build on each other's strengths.



#### Community

Coexisting and building trust.



#### For the Earth

Leave a sound environment to future generations.



# **Corporate Governance**

Lay a solid foundation for fulfilling social expectations.

#### Financial Capital

- Total capital: ¥623.1 billion
- Interest-bearing debt: ¥238.7 billion (excluding lease liabilities)
- Cash and deposits: ¥75.6 billion

#### **Manufactured Capital**

- Tire production sites: 8 domestic plants, 13 overseas plants
- MB production sites: 3 domestic plants, 8 overseas plants
- Natural rubber production site: 1 overseas plant
- Research and development bases: 1 domestic site,
   3 overseas sites
- Test courses: 2 domestic courses, 2 overseas courses
- Capital expenditures: ¥54.9 billion

#### **Intellectual Capital**

- R&D expenses: ¥16.0 billion
- Number of patents held: 6,242

#### **Human Capital**

- Number of employees: 28,468 (Consolidated) (Overseas: 18,500, Japan: 9,968)
- Employee training cost: 374 million yen (consolidated)
- Percentage of managerial positions filled by women:
   1.7% (non-consolidated), 10.1% (consolidated)
- Percentage of female employees: 7.2% (non-consolidated), 14.0% (consolidated)

#### Social and Relationship Capital

- Main countries of operation: 28 countries and regions
- The YOKOHAMA brands cultivated over 106 years in business (ADVAN, BluEarth, GEOLANDAR, ALLIANCE, GALAXY, PRIMEX, and more)

#### **Natural Capital**

- Total energy consumption: 1,837,184 MWh (consolidated)
- Total water intake: 8,247,000 m<sup>3</sup>



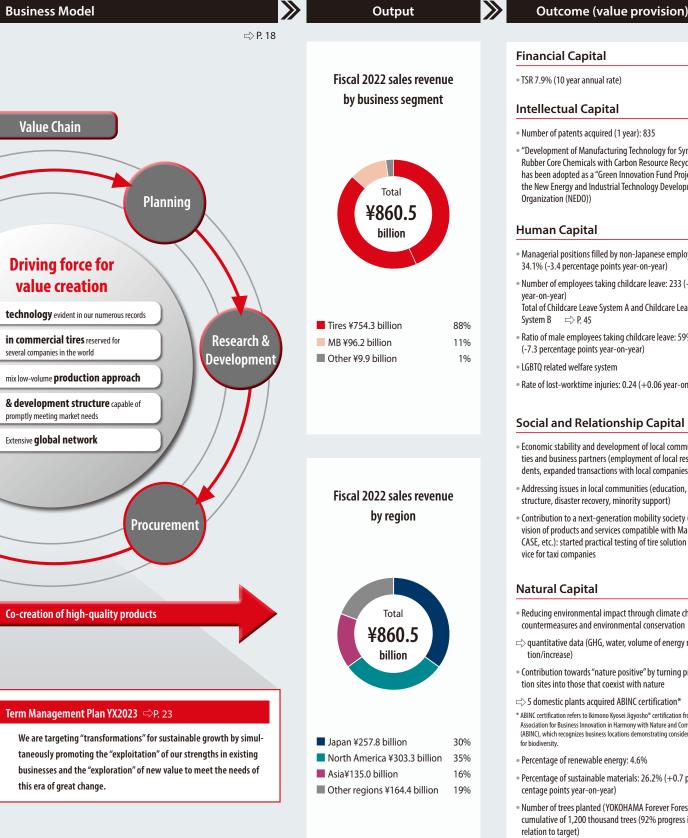
#### Corporate Governance

- Maintenance and strengthening of foundation for proper organizational governance
- Demanding effectiveness and diversity within the Board of Directors and organization





Yokohama Rubber strives to create diverse value ahead of the times through its advanced technology and global network amassed over the years. We aim to embody the basic philosophy "To enrich people's lives and contributing to their greater happiness and well-being by devoting our wholehearted energies and advanced technology to the creation of beneficial products" throughout our entire value chain, from planning to production and sales, together with our stakeholders.



#### **Financial Capital**

• TSR 7.9% (10 year annual rate)

#### Intellectual Capital

- Number of patents acquired (1 year): 835
- "Development of Manufacturing Technology for Synthetic Rubber Core Chemicals with Carbon Resource Recycling" has been adopted as a "Green Innovation Fund Project" by the New Energy and Industrial Technology Development Organization (NEDO))

#### **Human Capital**

- Managerial positions filled by non-Japanese employees: 34.1% (-3.4 percentage points year-on-year)
- Number of employees taking childcare leave: 233 (-2% vear-on-vear) Total of Childcare Leave System A and Childcare Leave □ P. 45
- Ratio of male employees taking childcare leave: 59% (-7.3 percentage points year-on-year)
- LGBTQ related welfare system
- Rate of lost-worktime injuries: 0.24 (+0.06 year-on-year)

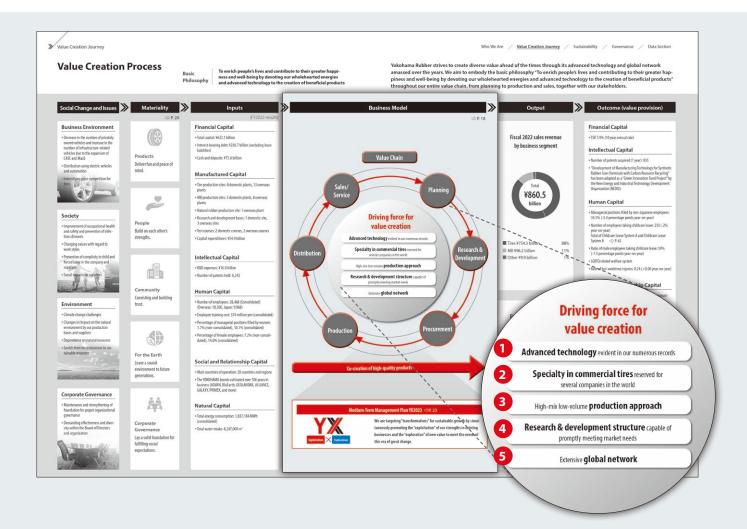
#### Social and Relationship Capital

- Economic stability and development of local communities and business partners (employment of local residents, expanded transactions with local companies, etc.)
- Addressing issues in local communities (education, infrastructure, disaster recovery, minority support)
- Contribution to a next-generation mobility society (provision of products and services compatible with MaaS, CASE, etc.): started practical testing of tire solution service for taxi companies

#### **Natural Capital**

- Reducing environmental impact through climate change countermeasures and environmental conservation
- quantitative data (GHG, water, volume of energy reduction/increase)
- Contribution towards "nature positive" by turning production sites into those that coexist with nature
- 5 domestic plants acquired ABINC certification\*
- \* ABINC certification refers to Ikimono Kvosei Jigvosho® certification from the Association for Business Innovation in Harmony with Nature and Community (ABINC), which recognizes business locations demonstrating consideration
- Percentage of renewable energy: 4.6%
- Percentage of sustainable materials: 26.2% (+0.7 percentage points year-on-year)
- Number of trees planted (YOKOHAMA Forever Forest): cumulative of 1,200 thousand trees (92% progress in relation to target)

#### **Sources of Value Creation**



# 1 Advanced technical prowess validated by an extensive track record of success

Yokohama Rubber's long-standing tire manufacturing technology and high reliability in quality have been recognized worldwide, with our tires used not only on Japanese automakers' vehicles, but also European luxury brands such as Porsche, Mercedes-AMG, and BMW. Furthermore, by

participating in motor sports in Japan and overseas, we have accumulated know-how in tire development technology that delivers advanced and safe handling even in the harshest conditions. In addition, Yokohama Pneumatic Fenders, which represent a world-first product developed with our rubber technology, are widely used around the world as shock absorbing materials for ships to berth at sea and in port for a number of fields such as petroleum, mining, fisheries, and offshore drilling.

# 2 Specialty commercial tires supplied by several companies around the world

Commercial tires are a highly profitable and growing segment where demand is expected to increase further in the future due to increased food production and expansion of logistics following economic development. Yet, the number of manufacturers that offer commercial tires is limited due to the particularly advanced technological capabilities required for development and production. In anticipation of these changes in the business environment, we decided to increase the ratio of commercial tires in our business portfolio, especially the OHT business, with the

acquisition of Alliance Tire Group B.V. (ATG) in 2016 to strengthen our development of tires for agriculture and forestry machinery. In 2017, we acquired Aichi Tire Industry, and in 2021, we integrated it under the name Yokohama Off-Highway Tires (YOHT). With the completion of the acquisition of Trelleborg Wheel Systems Holding AB (TWS) in 2023, we expanded our brand from Tier 1 to Tier 3 and established a full lineup of tire products. Our sales ranking in the OHT market has risen to the third largest in the world (Yokohama Rubber estimate). Going forward, we will leverage business synergies such as mutual utilization of our 22 global OHT production bases and joint purchasing of raw materials to demonstrate a high degree of competitiveness in the global market.

Value Creation Journey

#### Production system compatible with highmix, low-volume production

Believing that the mission of a manufacturer is to provide "good, affordable products in a timely manner," we have a wide range of production lines that support various product lineups globally. In order to respond to the different needs of each region, including summer, all-season and winter tires for passenger cars, trucks and buses, and motorsports, we adopted our unique high-mix, low-volume, smallscale production system that allows us to quickly and flexibly expand our production capacity. We were also the first Japanese tire manufacturer to set up business operations in Vietnam. This high-mix,

low-volume production system, which can respond finely to demand, has led to the establishment of a competitive advantage as one of our strengths. At production sites, by combining just-in-time production and other methods, we can efficiently produce a variety of products while responding quickly to fluctuations in demand.

We are also actively using digital technology in production, and we use real-time information to visualize and optimize production processes in production planning and production line monitoring. By utilizing data analysis and forecasting models, we optimize demand forecasts and production plans, and realize a high-mix, low-volume production system with greater accuracy.

#### Research & development system that can address market needs in a timely manner

By establishing tire R&D centers in regions close to the market, Yokohama Rubber is promoting the speedy launch of new products that meet local needs. The Group as a whole has tire R&D centers in Japan, Thailand, China and the United States, and a total of four comprehensive tire test courses in Japan, Thailand and Sweden.

In addition, we have been working on the development of new technologies and materials from an early stage, and are making efforts in technological innovation to meet market needs and address social and environmental issues, such as the growing demand for sustainable materials with low environmental impact, improved energy

efficiency, and the digitalization of the automotive industry. In 2014, we became the first company in the world to create simulation technology to visualize the "sound" around tires, and we have pioneered other technologies ahead of our peers by making full use of our advanced simulation technology. We have incorporated aerodynamic technology, a new perspective in tire design, and are working to develop products that not only reduce the air resistance of tires but also reduce the air resistance of the entire vehicle.

Additionally, we are using IT to strengthen our information management system and data analysis capabilities. As part of this, we have independently developed a tire characteristic value prediction system that utilizes digital AI to enable a huge number of virtual experiments, and we are using this system for a wide range of tire development.

## Extensive global network

Yokohama Rubber engages in business in countries around the world, and has 47 production and sales bases, not to mention more than 50 sales offices as part of its extensive global network. This presence supports corporate growth and contributes to local communities by providing products and services tailored to local needs, efficient production systems, and innovative technological development. Our tires and rubber products are manufactured at 11 plants in Japan and 36 plants overseas, providing ample production capacity to meet local demand. In addition to Japan, we have production bases in every corner of the globe, such as Asia, Europe, and the United States, to meet the demands of each region. In 2022, production began at the newly

constructed Visakhapatnam plant in India to increase YOHT's production capacity. In 2024, we plan to further bolster our production lines for passenger cars.

Our global sales network includes sales offices, agents and distributors to serve automotive manufacturers, consumers and companies around the world. Through our sales network, Yokohama Rubber is developing products and sales strategies tailored to market needs in many regions. Furthermore, we have established partnerships with automakers, parts suppliers, research institutes, universities, and others. As a result, we have established a system that allows us to respond quickly to the environment in the fiercely competitive global market and reflect this in our products and sales.

\*As of August 1, 2023

# Risks and Opportunities in Sustainability Management & Materiality

Process for Identifying Materiality

Materiality	Issues to Be Recognized	<b>&gt;</b>	Medium- and Long-Term Business Risks and Opportunities
Products  Deliver fun and peace of mind.	<ul> <li>The spread of CASE*1 and MaaS*2 in the automotive industry</li> <li>Innovation through the utilization of technology</li> <li>Increasingly diverse customer needs (cost, performance, quality, environmental and social contributions)</li> <li>The safety and security of customers</li> <li>1 CASE: An acronym for Connected, Autonomous, Shared &amp; Services, and Electric</li> <li>2 MaaS: Mobility as a Service. A new concept of integrating various types of transportation services into one and providing them to users</li> </ul>	Risks	Short-tomid-term Risk of accidents and lawsuits due to poor product safety, recalls and damage to brand value  Mid-to long-term Decline in product demand due to changing customer needs  Mid-to long-term Decrease in demand for winter tires due to decrease in snowfall  Short-tomid-term Sharp rise in resource prices
		Opportunities	Mid-to long-term New business opportunities through adapting to CASE and MaaS Mid-to long-term Responding to changing customer needs and stricter regulations at an early stage Improvements in competitiveness and profitability through reuse and recycling
The Earth  Leave a sound environment to future generations.  7 ***CHARGE STREET**  13 ***CHARGE STREET**  15 ***CHARGE STREET**  16 ***CHARGE STREET**  17 ***CHARGE STREET**  18 ***CHARGE STREET**  19 ***CHARGE STREET**  19 ***CHARGE STREET**  10 ***CHARGE STREET**  11 ***CHARGE STREET**  12 ***CHARGE STREET**  13 ***CHARGE STREET**  15 ***CHARGE STREET**  16 ***CHARGE STREET**  17 ***CHARGE STREET**  18 ***CHARGE STREET**  18 ***CHARGE STREET**  19 ***CHARGE STREET**  10 ***CHARGE STREET**  11 ***CHARGE STREET**  12 ***CHARGE STREET**  13 ***CHARGE STREET**  14 ***CHARGE STREET**  15 ***CHARGE STREET**  16 ***CHARGE STREET**  16 ***CHARGE STREET**  17 ***CHARGE STREET**  18 ***CH	<ul> <li>Climate change issues</li> <li>Achieving carbon neutrality</li> <li>Promoting a circular economy</li> <li>Preserving biodiversity</li> <li>Sustainable use and management of natural resources</li> <li>Prevention of pollution and chemical substance management</li> </ul>	Risks  Opportunities	Short-tomid-tem   Environmental laws and regulations and litigation risks     Mid-to-long-tem   Impact on climate change and air pollution, increase in energy costs     Mid-to-long-tem   Environmental impact of waste and emissions     Mid-to-long-tem   Depletion and shortage of water resources
People Build on each other's strengths.  5 man   Strengths   Stren	Respect for human rights Diversity & inclusion Workstyle reforms Human resources development Occupational health and safety	Risks Opportunities	Establishing traceability for the sustainable procurement of natural rubber  Mid-to long-term Improving skills and developing pleasant workplaces through human resources development
Community  Earn the confidence of our neighbors.  1 Notes 1	<ul> <li>Regional environmental issues, such as water and air pollution, and environmental destruction</li> <li>Regional social issues such as respecting the land rights of indigenous peoples, human rights violations, disasters, healthcare, trading irregularities and conflict minerals</li> <li>Revitalizing local communities, creating economic effects</li> <li>Communication with local communities</li> </ul>	Risks  Opportunities	Retaining talented human resources through health and productivity management  Stort-tomid-tem Local community opposition to operations due to the environmental impact of waste and emissions Risk of legal action and reputational risks due to social issues such as human rights violations occurring  Mid-tolong-tem Revitalization of local communities by solving environmental and social issues  Mid-tolong-tem Contributing to economic development by creating jobs in local communities  Mid-tolong-tem Provision of products and services tailored to changes to mobility services in the era of an aging population, depopulated areas and the new normal
Corporate Governance  Lay a solid foundation for fulfilling social expectations.  8 **BONDON ON THE PROPERTY OF THE PROPERTY O	<ul> <li>Maintenance and strengthening of foundation for proper organizational governance</li> <li>Sustainable improvement of corpo- rate value</li> <li>Effectiveness and diversity of meet- ing bodies such as the Board of Directors and committees</li> </ul>	Risks  Opportunities	Mid-to long-term Mid-to

Dialogue with stakeholders and

disclosures

#### STEP 1

#### STEP 2

#### STEP 3

#### STEP 4

#### G4 Gap Analysis

We referenced the G4 demands in relation to current information disclosure levels in CSR Report 2013 and ascertained the current status of compliant and noncompliant items. (Implemented January 2014)

#### Prioritizing Issues

An analysis was conducted in accordance with the industries, business sectors and regions in which Yokohama operates. Following the analysis, priorities were assigned to the issues at Yokohama Rubber through discussions with related business units. (Implemented January to February 2014)

# Reflecting External Perspectives in the Priority of Issues

Interviews were conducted with five stakeholders. Based on the results of the interviews, priorities were determined from each aspect. (Implemented February to March 2014)

#### **Determining Material Issues**

In light of the degree of importance analysis, research and discussions conducted in steps 2 and 3, the important issues were determined in 2014.

#### **>>**

#### Initiatives in fiscal 2022

- Promoted the supply of tires for original equipment (OE) use in electric vehicles
- Developed racing tires utilizing sustainable materials
- Researched and developed rubber materials using biomass-derived resources
- Developed a technology to estimate the state of wear based on in-tire sensing waveforms
- Started demonstration tests on tire solution service for taxi business operators
- Began field demonstration tests of sensing systems to be installed in conveyor belts and marine hoses
- Started turning the Shinshiro-Minami Plant into a carbon-neutral model plant and installed solar power generation system
- Switched electricity used at plants to renewable energy-derived electricity (in plants in India, among others)
- Promoted YOKOHAMA Forever Forest Activities
- The Hiratsuka Factory received the FY2022 Distinguished Services Award for Regional Environmental Conservation from the Ministry of the Environment
- Yokohama Rubber's Mie Plant and Shinshiro Plant obtained the Ikimono Kyosei Jigyosho® certification as factories showing consideration for biodiversity
- Formulated the Yokohama Rubber Group Human Rights Policy
- Revised the CSR procurement guidelines
- Hosted seminar events aimed at supporting natural rubber framers in Thailand and Indonesia and improving quality
- Hosted Suppliers' Day, a networking event with natural rubber suppliers
- Tackled health and productivity management through Collaborative Health in conjunction with health insurance societies
- Held briefing sessions for local residents on environmental conservation activities at plants and set up exhibition booths at local events
- Conducted biodiversity conservation activities and social contribution activities in collaboration with local residents, local governments, schools and businesses (for example, the Nodagawa Firefly Project by Shinshiro Plant)
- Conducted environmental outreach classes for elementary school students in the community
- Provided seedlings cultivated at plants to local residents and tree planting events
- Supported social contribution organizations and disaster victims through the YOKOHAMA Magokoro Fund
- Expanded the Global Whistle-Blowing System (Vietnam, Thailand)
- Reviewed the corporate governance system (moved from a company with auditors to a company with an audit and supervisory committee with approval at the General Meeting of Shareholders held in March 2023)

#### Yokohama Rubber's Initiatives and Vision

- Manufacture and sale of tires and industrial materials with high levels of safety, quality and environmental performance
- Manufacture and sale of carbon neutral products
- Development of biomass rubber and promotion of retread tires
- Development of products and services that utilize Al and IoT technologies (wear detection, road surface detection, tire management, damage prediction)
- Manufacturing and selling tires for industrial and construction vehicles that support social infrastructure, agriculture and forestry machinery that contribute to sustainable production in the agriculture and forestry industry
- Manufacturing and selling industrial products that contribute to greenhouse gas reduction
- Achieve carbon neutrality in Yokohama activities by 2050
- Sustainable material usage rate of 100% by 2050
- Reach 1.3 million cumulative trees planted in YOKOHAMA Forever Forest Activities by 2030
- Sustainable natural rubber procurement
- Coexistence and shared prosperity with agroforestry farming method promotion and rubber farmers
- Roll out activities to preserve biodiversity at production sites
- Prevent and mitigate the risk of human rights abuses through human rights due diligence
- Implementation of procurement in accordance with CSR procurement quidelines
- Strengthening activities in the Diversity & Inclusion Promotion Taskforce
- Expanding systems for flexible workstyles
- Developing and selecting value-added human resources
- Strengthening of safety and disaster preparedness initiatives
- Health management initiatives
- Supporting biodiversity conservation activities, healthcare and education in local communities
- Disaster prevention and disaster relief activities in local communities
- Collaboration with the YOKOHAMA Magokoro Fund and NPOs
- Implementation of procurement in accordance with CSR procurement guidelines
- Creation of employment in regions where our business is developed
- Clarifying commitment to business plans through medium-term performance-linked compensation scheme
- Diverse executive personnel with the skills necessary for management strategy
- Strengthening the governance system
- Strengthening business continuity plans (BCPs)
- Developing systems to promote compliance

# **Looking Back on Past Medium-Term Management Plans**

0.8 times or less

#### **Looking Back on Past Medium-Term Management Plans**

#### Medium-Term Management Plan

FY2015-FY2017

GD100 Phase IV

All for Growth

Open the way for the next 100 years by bringing together the potential of Yokohama Rubber

#### Medium-Term Management Plan

FY2018-FY2020

GD2020

Fortifying our business foundation by redefining Yokohama's strengths and deploying growth strategy through original approaches

#### FY2017

D/E ratio

**Management indicators** 

Acquired strengths

Strategies and main results

Net sales \$\frac{\pmathbf{770 billion}}{\pmathbf{280 billion}}\$

Operating income margin \$\frac{10.4\%}{\pmathbf{280 or more}}\$

ROA (net income) \$\frac{5\%}{\pmathbf{0} or more}\$

ROE (net income) \$\frac{12\%}{\pmathbf{0} or more}\$

#### FY2020

D/E ratio

Sales revenue

#700 billion

Business profit

#70 billion

Business profit margin

Operating CF

\*\*ROE

\*\*TO0 billion

10%

 $0.6 \, \text{times}$ 

#### **Progress of Global Expansion**

- Enhanced network of production, sales and technology sites
- Expanded overseas business of tires for new vehicles
- Enhanced global brand recognition (partnership agreement with English Premier League Club Chelsea FC)

# Improvements to Technologies That Contribute to the Environment

- Achieved a 100% ratio of products that contribute to the environment
- Global rollout of fuel-efficient replacement tires
- Expanded adoption and delivery of fuel-efficient tires for new vehicles

#### **Strengthening of the Business Portfolio**

- Acquired agricultural machinery and construction vehicle tire manufacturer (ATG)
- Acquired industrial vehicle tire manufacturer (Aichi Tire Industry)

# Consumer Tire Business: Expanding Our Presence in the Premium Tire Markets

- Premium car strategy: Expanded installation on new vehicles, centered on high-inch, high-performance tires, to 13 car models, including the Porsche Cayenne and BMW X3.
- Winter tire strategy: Introduced new products including BluEarth-4SAW21 all-season tires and iceGUARD iG53 studless tires for North America.
- 3. Hobby tire strategy: Introduced six new products to meet the tastes of all types of automobile users, including the GEOLANDAR X-AT for SUVs and pickup trucks.
- 4. Communications strategy: Reinforced direct marketing using digital technologies and proactive communication with end users.

# Commercial Tire Business: Making Commercial Tires a Pillar of Revenue for the Next 100 Years

- 1. OHT business: Growth of ATG, acquired in 2016, resulted in a higher-than-expected commercial tire business share of net sales.
- 2. TBR business: Despite impairment losses recorded in 2018 with respect to the Mississippi plant (US), which commenced operations in 2015, Yokohama Rubber made efforts to improve supplies, including addressing equipment and human resource issues, and expanded sales.

#### MB business: Focusing Resources in Areas of Strength

 Expanded shipments of automotive hoses in North America in the automotive parts business, delivered the world's largest floating pneumatic fenders in the marine products business, strengthening both businesses.

#### Improving product mix by concentrating resources on high-value-

- Realizing benefits of major investments and acquisitions made in Phase IV
- Strengthening the financial position

#### Strategic aspect

- Consumer tires: Expanding our presence in premium tire markets
- $\bullet$  Commercial tires: Further strengthening the OHT and TBR business.
- MB: Focusing resources in areas of strength

#### Business environment aspect

Initial targets of  $\pm$ 700 billion in sales revenue and  $\pm$ 70 billion in business profit were not achieved due to factors such as the economic slow-down caused by the global spread of COVID-19 in 2020.

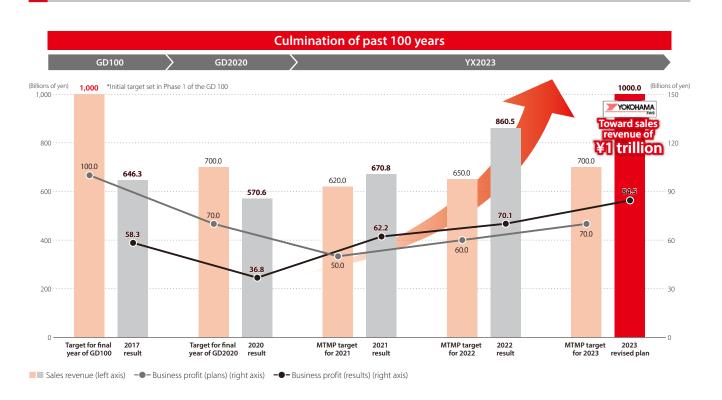
# ssues Weaknesses to overcome

# **Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)**

The Yokohama Rubber Group is currently promoting the three-year medium-term management plan, YOKOHAMA Transformation 2023 (YX2023), which runs from FY2021 to FY2023. The "Y" stands for YOKOHAMA and the "X" for transformation, as we plan to transform the Group through "exploitation" and "exploration." Under YX2023, we are targeting "transformations" for sustainable growth by simultaneously promoting the "exploitation" of our strengths in existing businesses and the "exploration" of new value to meet the needs of this era of great change.



#### **Sales Revenue and Business Profit Targets**



#### **Financial Targets**

The Yokohama Rubber Group targets all-time high sales revenue of ¥1 trillion and business profit of ¥84.5 billion in fiscal 2023, the final year of YX2023, representing the culmination of our efforts over the past 100 years. In 2017, the 100th anniversary of our founding, we targeted ¥1 trillion in net sales and ¥100 billion yen in operating income, but ultimately fell short. In FY2023, having acquired the business of Trelleborg Wheel Systems, we achieved our FY2017 goal of ¥1 trillion in sales revenue, taking the next step toward growth with profitability.

#### > FY2022 results and YX2023 plan

(Billions of yen)	2021 results	2022 results	YX2023 targets
Sales revenue	670.8	860.5	1,000
Business profit	62.2	70.1	84.5
Business profit margin	9.3%	8.1%	8.5%
Operating income	83.6	68.9	-
Profit attributable to owners of parent	65.5	45.9	-
ROIC	8.2%	5.2%	5.2%
ROE	13.9%	8.1%	9.0%
D/E ratio (Net D/E ratio)	0.34 times (0.26 times)	0.39 times (0.27 times)	0.73 times (0.63 times)
Operating CF	68.3	39.2	122.5
Capital investment	38.8	54.9	≤ depreciation (excl. strategic investments)

#### Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

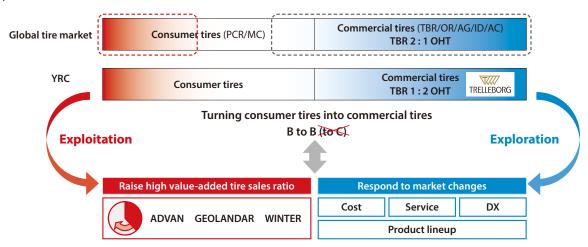
#### Megatrends

#### Mobility industry structural changes and tire business strategy

At present, the size of the global tire market is approximately ¥20 trillion, split almost equally between "consumer tires" such as tires for passenger cars, and "commercial tires" including tires for trucks, buses, and agricultural machinery. Going forward, however, developments such as Connected, Autonomous/Automated, Shared, Electric (CASE), Mobility as a Service (MaaS), and Digital Transformation (DX) are expected to reduce the number of privately owned vehicles, and at the same time, increase the number of public infrastructure vehicles supporting the movement of people and goods. This means that, as customers transition from individuals to corporations, consumer products in the tire market are expected to become commercial products.

In response to these changes, Yokohama Rubber is advancing a strategy based on two key approaches, "exploitation" and "exploration." In consumer tires, we will raise the ratio of high-value-added tire sales through the "exploitation" of ADVAN, GEOLANDAR, and winter tire sales. In commercial tires, to optimize the sales composition ratio of consumer tires to commercial tires, currently 2:1, to 1:1 in line with the size of the global market, we acquired Trelleborg Wheel Systems Holding AB (TWS) based on our belief in the importance of off-highway tires (OHT), which are positioned as a growth driver. In addition to optimizing overall tire composition, we will engage in the "exploration" of market changes under the themes of product lineup expansion, costs, services, and DX.

#### > Impact of CASE/MaaS on tire business

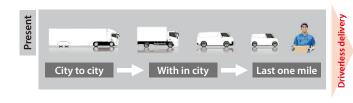


#### Logistics transformations and our product strategies

At present, deliveries are made by drivers operating a range of vehicles, from large trailer trucks to small trucks and vans, but going forward, vehicle electrification and autonomous driving are expected to facilitate the transport of goods over long and short distances, including the last mile to the recipient, without drivers. The various types of vehicles used for logistics in the near future will require

different types of tires. For example, last-mile vehicles may be equipped with no-puncture solid tires. Our strength lies in our ability to provide a one-stop source for a wide variety of tires, from truck and bus tires, to airless resistant tires in response to this logistics transformation. Going forward, we will continue to further expand product varieties with the aim of further strengthening our competitive advantage in the market.

#### > Expected transformation of vehicles used in each stage of the distribution process





## **Tire Business** Consumer Tires: Maximizing the ratio of high-value-added Tires

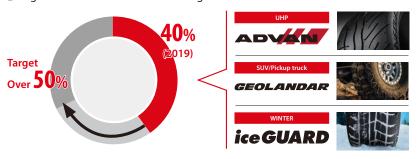
To raise the sales ratio of high-value-added tires in the consumer tire business, we aim to maximize sales with a focus on ADVAN ultra-high-performance tires, GEOLANDAR for SUVs and pickup trucks, and winter tires.

#### Maximizing the Ratio of High-value-added Tires

Under YX2023, we aim to increase the ratio of high-value-added ADVAN, GEOLANDAR, and winter tire (AGW) unit sales within consumer tires from 40% in fiscal 2019 to 50% or higher. To this end, we are expanding ADVAN and GEOLANDAR tires as original equipment

on new cars, strengthening sales in the tire replacement market, and expanding the size lineups for these brands as well as winter tires, and enhancing sales measures in line with the characteristics of specific regions.

#### > High value-added tire sales ratio target

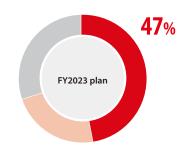


- 1 Expand OE use of ADVAN and GEOLANDAR
- Strengthen sales in replacement market and expand size lineups including for WINTER tires
- Strengthen sales of tires suited to local market needs

In fiscal 2022, the ratio of high-value-added tires was 42%, with sales of ADVAN, GEOLANDAR, winter tires, and tires measuring 18 inches and larger surpassing those in fiscal 2021. In fiscal 2023, we plan to increase the ratio of high-value-added tires to 47%. Sales of ADVAN

tires exceeded initial plans and are now 172% of fiscal 2019, while sales of 18-inch and larger tires have been revised upward from 155% to 169%.

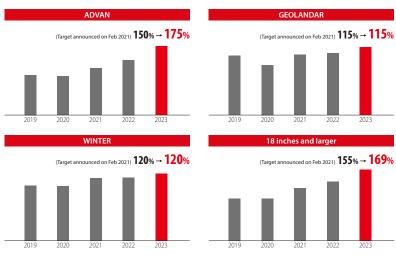
#### ➤ AGW sales ratio



OE/REP Size Lineup Expansion Trends
(Launching new tires & expanding available sizes) (No. of sizes)

	2022	2023 plan
ADVAN	195	97
GEOLANDAR	39	139
WINTER	109	126
AGW total	343	362

#### > AGW sales volumes (vs FY2019)



#### Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

#### **Efforts in Fiscal 2022**

#### **Expanding OE installation of ADVAN and GEOLANDAR**

In terms of OE installations on new premium cars, ADVAN V61 tires were installed on the Lexus RX, the Toyota bZ4X and other cars, and ADVAN Sport V107 tires were installed on the Nissan Fairlady Z. ADVAN V61 tires were developed using the proprietary HAICoLab framework which incorporates AI, and to achieve the high degree of quiet specifically required for EVs, we used advanced computations (genetic algorithms), one of the technologies facilitated by the HAICoLab, to realize optimal pitch arrangements. ADVAN Sport V107 for the new Nissan Fairlady Z adopts our SILENTFOAM noise reduction technology to improve quietness. Cavernous resonance (tire vibrations caused by uneven road surfaces resonate inside tires, resulting in tire noise that can be heard through the suspension in the cabin) is reduced by coating the inside of the tire with a specially designed polyurethane foam. Regarding GEOLANDAR, GEOLANDAR X-CV tires were installed on the LEXUS LX. The GEOLANDAR X-CV is a new dimension highway terrain tire developed for high-performance SUVs that emphasize highspeed performance and mobility, which have been on the rise in recent years.





Tovota bZ4X

Lexus LX







#### Strengthening sales in the tire replacement market

In the replacement market, we positioned fiscal 2022 as the "YOKOHAMA Summer Offensive"-themed year and succeeded in efforts to expand sales of ADVAN products, mainly ADVAN Sport V107 ultra-high-performance tires and ADVAN NEOVA AD09 high-performance street sport tires. We also saw strong sales of BluEarth-RV RV03, the first new product launched in the area of fuel-efficient tires specifically designed for minivans in seven years.

#### Fiscal 2023 Initiatives and Issues Going Forward

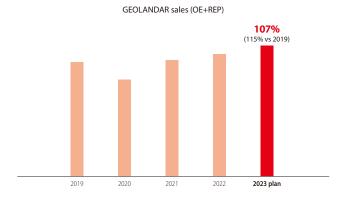
In FY2023, we will strive to further expand sales with the launch of GEOLANDAR and other new products under the theme "Mud Match."

Regarding the GEOLANDAR brand, in addition to new GEOLANDAR A/T XD tires, we will launch the GEOLANDAR X-AT for passenger cars and the GEOLANDAR CV 4S, and expand sizes of each pattern. We will also begin delivery of tires for the Toyota Tundra and other new vehicles in North America, and further increase production of large outer diameter tires at our plants in Mie Prefecture and Thailand in response to increased sales. Through these efforts, we aim to achieve the target set forth in YX2023, with FY2023GEOLANDAR sales reaching 107% of the FY2022 level and 115% of the fiscal 2019 level.

Regarding ADVAN tires, which celebrate their 45th anniversary this year, we plan to deliver ADVAN APEX V601 tires for new installation on the Toyota Corolla GR, and launch electric vehicle (EV) tires in the replacement market. We will take on various

challenges in an attempt to maximize the ratio of high-value-added products with the aim of achieving YX2023 targets in this final year of the plan.

➤ Increase GEOLANDAR sales Aiming to boost sales to 107% the previous year's level (115% the 2019 level)



#### **Tire Business** Commercial Tires: Incorporating market changes to further strengthen business

Value Creation Journey

In commercial tires, we aim to "explore" market changes under the themes of cost, services, digital transformation (DX), and expanded product lineups. In acquiring TWS, we aim to improve profitability by expanding the OHT business.

#### **Efforts in Fiscal 2022**

#### **OHT Business: New plant in India commences operations**

Yokohama Off-Highway Tires (YOHT), a subsidiary that manufactures and sells off-highway tires (OHT), including tires for agricultural machinery, continues

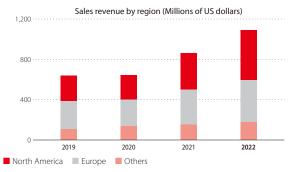


to grow well above the growth rate of the market. In response, the existing Dahej plant achieved a 1.6-fold increase in production capacity, and construction of the Visakhapatnam plant began in the third quarter of 2020. This plant was originally scheduled to commence operations in 2023, but to meet strong demand, plans were moved forward and production commenced in August 2022. As a result, production capacity at the end of fiscal 2022 was approximately 40% higher than in fiscal 2019. The annual production capacity of the new plant is projected to be 69 tons per day (rubber weight) in the first phase and 132 tons per day (rubber weight) with the addition of second phase expansions. The second phase of production is scheduled to start in the first quarter of 2024, with a view to further capacity expansions in the future.

#### OHT Business: Leveraging cost advantages to increase sales

In the OHT business, we leveraged cost advantages to increase sales in each channel, including North America, achieving ongoing growth in fiscal 2022 despite the challenging environment.

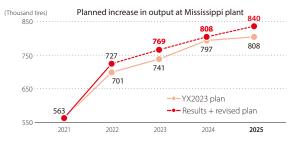
#### Cost advantages supporting sales growth



#### Supply improvement in the TBR plant in the US

In the truck and bus tires (TBR) business, we promoted improvements at the Mississippi plant in the US, with fiscal 2022 production volume reaching a record-high 727,000 tires and achieving the medium-term production plan established under YX2023.

#### Increasing output at the TBR plant in the US



#### Investing in increased production at the Mie Plant, launching new products

At the Mie Plant, we have decided to invest in the increased production of tires for trucks and buses, the demand for which is growing in Japan, Europe, and the US, with the aim of commencing operations in 2024

We are also proactively launching new products, with products for Japan launched in 2022 such as 905W studless tires, which emphasize driving performance on ice and snow, and BluEarth 711L all-season tires, which emphasize fuel-efficient performance.

905W tires provide the long-life performance that made the previous model popular, while further improving grip on winter road surfaces and driving performance on ice and snow.

BluEarth 711L tires offer the highest fuel efficiency in the history of Yokohama truck tires, and demand for this product is expected to increase in light of its substantial contribution to reducing customer transportation costs. These tires also received the Good Design Award for 2022. This is the third time Yokohama truck and bus tires have received this award after receiving it in 2019 and 2020.

# > Value Creation Journey

# Fiscal 2023 Initiatives and Issues Going Forward

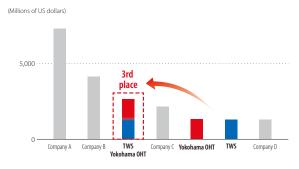
Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

#### **Completed acquisition of Trelleborg Wheel Systems Business**

In May 2023, we completed our acquisition of Trelleborg Wheel Systems Holding AB (TWS). With this acquisition, we estimate our position in the global OHT market will be the third largest in the world (based on a simple aggregate of Yokohama Rubber Group and TWS sales in FY2022). In addition to making our position in this market a competitive advantage, we will build a solid position in the OHT market by enhancing our broad brand lineup of basic, standard, and premium products, and strengthening our R&D, production, and service systems in Japan, North America, Asia, and Europe, where global demand is highest. We also aim to provide new products and services combining the knowledge of both companies in the use of DX and sustainable raw materials. In fiscal 2023, we will firmly implement a PMI program to maximize synergies created by the TWS acquisition to achieve this goal. 

⇒ For details, please see "Special Feature" on P.8.

#### > OHT market sales ranking



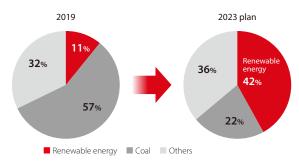
\* Our estimate

#### **OHT** business initiatives

In the OHT business, we target ongoing growth on the strength of YOHT's extensive product lineup and overwhelming cost competitiveness, as well as YOKOHAMA-TWS (Y-TWS) world-class product, brand, technological, and service capabilities. The new Visakhapatnam plant, which commenced production in August 2023, is planned to be fully operational in FY2024, with a second

#### Usage of renewable energy

#### Power source composition of YOHT Dahej and Tirunelveli plants



phase of expansion already underway. Further, the Dahej and Tirunelveli plants will increase the use of renewable energy from 11% in fiscal 2019 to 42% in fiscal 2023 with the aim of contributing to the environment and reducing costs.

#### Investments to expand production at the Mie Plant

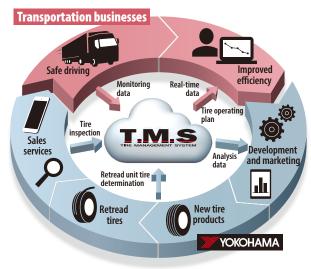
We will make additional investments in the Mie Plant to increase production capacity by approximately 100,000 tires to meet brisk demand for standard-sized truck and bus tires, and consider further production increases going forward.

#### DX and service enhancements

With regard to DX and services, we will maintain our focus on enhancing knowledge and expertise accumulated through the Tire Management System (TMS) we have been developing since 2003. The number of vehicles inspected in 2022 rose to 180% of the year before. In fiscal 2023, we will continue efforts to improve inspection efficiency and increasingly incorporate digital devices with the aim of solving customer problems.

Additionally, with the aim of establishing a new tire solution service, in March 2023 we commenced demonstration testing of a tire air pressure remote access system (TPRS) using an EV bus equipped with tire pressure sensors attached to the inner surface of the tires. With the global shift to EVs in full swing, we aim to establish a solution service that contributes to improving EV bus economy, safety, and efficient tire use by conducting demonstration tests using actual EV buses, which require high levels of fuel efficiency (electricity expenses), performance, and durability, as well as quiet tires. Data obtained from demonstration testing will be utilized in the development of tires for EV buses, with the aim of providing high-value-added products and services facilitating the shift to EVs.

#### > TMS concept diagram



# Multiple Business (MB) Transitioning to a high-growth, highly stable portfolio

By concentrating resources on our strengths in the Hose and Couplings and Industrial Products businesses, we can establish a portfolio that ensures stable earnings. We have also made the decision to implement reforms in the Aerospace Products business to ensure stable earnings with the aim of developing business that meets modern needs.

#### **Efforts in Fiscal 2022**

#### Focusing resources to strengthen and expand business

#### **Hose and Couplings**

Growth driver Increase production capacity, reorganize production sites Industrial Products
Stable earnings
Maximize market share

#### **Business restructuring**

Hamatite
Transfer completed in November 2021

Aerospace Products
Structural reforms

In the Hose and Couplings business, we reorganized the production system for automotive hose couplings in the US and Mexico. Further, with regard to hydraulic hoses, after investing in increased production capacity at the China plant, we made the decision to invest in increased



Hydraulic hoses for construction machinery

production at the Ibaraki Plant. Going forward, we will increase the production capacity for large-diameter hoses to capture growing demand.

In the Industrial Products business, we set out to maximize our domestic market share of conveyor belts, and as a result of efforts to



Highly heat-resistant conveyor belt

strengthen domestic sales and expand our lineup of standard stock products, we achieved a 1.5-fold increase in sales over the previous year and gained approximately 50% of the market share. To further strengthen our supply system, we will continue to increase the production capacity of conveyor belts at the Hiratsuka Factory. Additionally, the Aerospace Products business was integrated with the Industrial Products business in March 2022 to promote structural reforms aimed at ensuring stable earnings by concentrating resources.

#### Fiscal 2023 Initiatives and Issues Going Forward

In the Hose and Couplings business, we will maintain efforts to reorganize automotive hose coupling production bases. In fiscal 2023, we plan to increase the ratio of production at our base in Mexico to 31%. Regarding hydraulic hoses, we will further strengthen supply systems

in Japan and overseas, aiming for growth in line with profitability.

In the Industrial Products business, we plan to focus on maximizing our share of the domestic conveyor belt market while also launching new conveyor belt and fender products.

## **Other Business (PRGR Business)**

In the PRGR (Pro Gear) business, we aim to provide excellent products and services grounded in the customers' perspective so that everyone can experience the fun and joy of golf. To provide excellent products and services, we will improve our product capabilities by establishing a product system that meets the needs of users in Japan and overseas, and by exploring user needs and realizing the performance requirements for our products.

In fiscal 2022, we utilized test hitting data from directly-managed stores to design the center of gravity for each target in our new line of IRON

products for 2023. To provide customers with clubs that fit even better, in 2023 we are expanding sales of custom-ordered products by strengthening unique fittings at retailer events and directly-managed stores.

By exploring these new technologies and strengthening marketing,

as well as promoting business activities based on transparent health and safety and compliance, we aim to sustainably enhance corporate value to create a prosperous society.



PRGR 02 IRON

# **Research & Development**

Yokohama Rubber is working to develop high-quality tires using innovative technologies based on changing needs. While pursuing performance improvements such as durability, safety, and fuel efficiency, we test and evaluate the behavior and performance of tires under various conditions in Japan and overseas. We are also focusing on research into the use of sustainable materials, weight reduction, and recycling technologies, and are promoting the manufacture of environmentally friendly products. The results of our R&D lead to improved tire performance and reduced environmental impact, contributing to the safety and sustainability of the automotive industry as a whole.

# Products Manufacturing and selling tires and industrial materials with advanced safety, quality and environmental performance Manufacturing and selling carbon neutral products Developing products and services utilizing Al and IoT (wear detection, road surface detection, tire management and damage prediction) Manufacturing and selling tires for industrial and construction vehicles supporting social infrastructure and tires for agricultural and forestry machinery supporting natural capital Achieve carbon neutrality of our own activities by 2050 Achieve 100% usage of sustainable raw materials by 2050

#### **Basic Policy on Research & Development**

The Yokohama Rubber Group's research and development involves taking on challenges on the forefront of global technology and providing pioneering, world-first products to the market. On our frontline of research and development, we engage in multi-faceted and comprehensive research and development activities from material development to product design, testing and evaluation along the themes of

ingenuity, application and greater sophistication of technologies, and pursue the possibilities of various technologies and products, including rubber polymer technologies. In addition, outside the field of tires, we use innovative ideas unconstrained by conventional thinking and cutting-edge technologies to pursue the development of new materials and the design of products with a view toward the next generation.

#### **Research & Development Promotion System**

Under the idea of "local production for local consumption," Yokohama Rubber is strengthening tire research and development activities in regions close to major markets in Japan and overseas. Utilizing our global R&D system close to consumer areas, such as the Tire Test Center of Asia in Thailand, the Yokohama China Technical Center in China, and the Yokohama Development Center America in North Carolina, United States, we are able to quickly launch new products suitable for each market.



#### **Evaluating Tires Around the World to Guarantee Performance**

In order to verify tire performance, we have set up test courses in consumer areas in Japan and overseas to utilize information on the actual local climate and environment in our products, and are earnestly working on research from all angles such as safety, drivability, and comfort. The enormous amount of data obtained from driving tests at Yokohama Rubber's comprehensive tire test courses at the Daigo Proving-ground and Research Center (D-PARC, Ibaraki) and the Tire Test Center of Asia (Thailand), the Nürburgring Test Center (Germany) and winter tire test courses at the Hokkaido Tire Test Center and Yokohama Test Center of Sweden is sent instantly to the

Research and Development Integrated Center (RADIC) at the Hiratsuka Factory in Hiratsuka City, Kanagawa Prefecture, where it is used to improve tire performance and develop next-generation tires.



Comprehensive tire test course at D-PARC (Ibaraki Prefecture)



Winter tire test course at Yokohama Test Cente of Sweden

#### HAICoLab\* Al-powered data utilization framework

For more than a decade, Yokohama Rubber has been developing technologies to apply computer science and machine learning to the development of materials. The HAlCoLab, which came on line in 2020, is our proprietary Al-powered data utilization framework that combines simulation technologies and Al technologies and also focuses on human characteristics. We aim to promote new discoveries through "human-specific inspiration" and "creativity" and

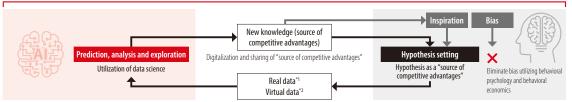
"collaboration between the enormous data processing capabilities that AI excels at" aimed at non-continuous and radical innovation. The new knowledge gained by generating and collecting virtual data from real data and simulations, and predicting, analyzing, and searching with AI is being utilized for innovation in tire technology development.

\*A coined term based on "Humans and AI collaborate for digital innovation."

#### > Conceptual image of HAICoLab

Improving user experience (Society 5.0)

Innovation of processes, products and services

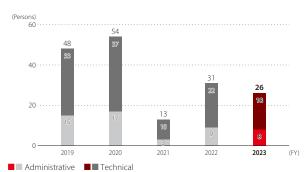


\*1 Utilization of IoT
\*2 Utilization of computer science
(simulations)

#### Securing and Developing Talent in Development

Yokohama Rubber strives to secure human resources stably in technology development as core human resources to maintain our strengths of high technology and innovation. In the recruitment of new graduates, we maintain strong cooperation with universities to ensure stable recruitment every year. We also hire a wide range of mid-career employees. Of the number of new graduates hired in fiscal 2023, 18 were technical personnel, while six of the mid-career hires during the year were also technical personnel. In addition, the Yokohama Techno Forum (YTF), which is held as an opportunity to share knowledge and raise awareness of internal technology research, was held 38 times in 2022.

#### New graduate recruitment



#### **Intellectual Property**

Intellectual property activities are an important investment in the protection and development of our business. We are conducting intellectual property activities to strengthen high value-added products, carbon neutrality, and circular economy, among others, which are covered under the policy of YX2023. In addition, we promptly reflect the status and direction of our business in activities such as the acquisition and utilization of rights such as patents, designs, and

trademarks, and efficiently and proactively carry out activities such as the acquisition of rights in cooperation with business departments. As a result, the number of domestic and overseas patent rights held during the previous management plan (GD2020) increased by more than 10%. At least once a year, we report on the status of intellectual property strategies and activities at meetings attended by members of executive management with technical expertise.

#### **Future Issues and Measures**

At Yokohama Rubber, one of our challenges is to make more effective use of the vast amount of research and development data (actual product and lab sample test results, simulation results, manufacturing and processing conditions, etc.) that we have accumulated

to date. This is an area that we are now working to address. In the future, we will develop a foundation that makes it easier for engineers to use this data, leading to the improvement of individual skills, new awareness, and quantification of tacit knowledge (skill transfer).

# **Production & Quality**

# Products • Manufacture and sell tires and industrial materials with advanced safety, quality and environmental performance • Manufacture and sell carbon neutral products • Develop products and services utilizing Al and IoT (wear detection, road surface detection, tire management and damage prediction) • Manufacture and sell tires for industrial and construction vehicles supporting social infrastructure and tires for agricultural and forestry machinery supporting natural capital • Achieve carbon neutrality of our own activities by 2050 • Achieve 100% usage of sustainable materials by 2050

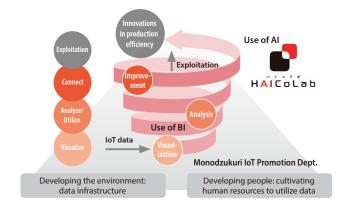
#### **Production Initiatives**

# Building a production and logistics structure that is resilient to environmental changes and fluctuating orders

In order to supply good quality products at a low price in a timely manner to customers around the world, Yokohama Rubber conducts manufacturing at its global production bases with the latest technology and thorough quality management. As it is a fundamental policy in YX2023 to raise the high-value-added tire sales ratio, we strive to push forward with our strengths in high-mix low-volume production systems, and enhance production efficiency through the utilization of digital technology, such as IoT and AI, and Jidouka (autonomation).

Yokohama Rubber also puts efforts into creating an environmentally friendly production system. In fiscal 2022, efforts were implemented to achieve carbon neutrality at the Shinshiro-Minami Plant, which serves as a model plant. All production bases in Japan have achieved complete zero emissions by reducing the amount of landfill disposal of industrial waste to zero. Going forward, we plan to implement IT-based initiatives in overseas locations as well as strive to achieve a circular economy.

Developing Infrastructure for the Utilization of Manufacturing Data and Fostering a Data-Driven Culture



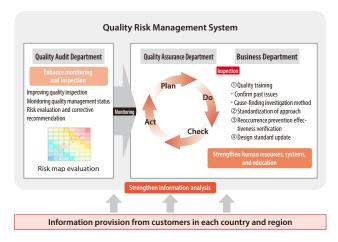
#### **Quality Initiatives**

#### **Quality management system**

Yokohama Rubber places the safety of customers as a top priority. We have developed our own risk map to ensure prompt, legal, and appropriate internal processes are carried out in business, quality assurance, and service departments, which are overseen and monitored by the Quality Audit Department.

We conduct quantitative categorization of potential risks following the quality management system (QMS) and embrace proactive safety design approach based on FMEA\* to establish a structure that prevents the reoccurrence of similar quality issues. Moreover, we conduct internal quality training as well as encourage managers and supervisors to acquire the certification of internal quality auditor. In fiscal 2022, three employees obtained their certification (total 147 certified to date).

We appoint experienced engineers at sales subsidiaries and sales locations in the domestic and overseas markets to systematically host internal training on product knowledge and handling.



Failure Mode and Effect Analysis (FMEA): A method of systematically analyzing potential failures for the purpose of failure/defect prevention.

# **Motorsports Activities**

For 60 years, since the Company began supplying tires to motorsports in Japan in 1963, Yokohama Rubber has participated in a wide range of motorsports in Japan and abroad, including races and rallies. By utilizing the advanced technical capabilities and knowledge cultivated in the field of motorsports, where extreme driving is required, in the development of tires for passenger cars, we are creating high-performance tires with excellent safety and quietness levels, and reduced environmental impacts while offering an exhilarating driving experience.

#### **Relevant material issues Initiatives** Manufacture and sell tires and industrial materials with advanced safety, quality and environmental performance Manufacture and sell carbon neutral products Achieve carbon neutrality of our own activities by 2050 The Earth Achieve 100% utilization rate of sustainable raw materials by 2050

#### Yokohama Rubber's Commitment to Motorsports

Yokohama Rubber supplies tires to a wide range of motorsports in Japan and abroad, from the top category to the grassroots category. Motorsports is a grand testing ground for tire development, and the technology cultivated through competition is fed back to our development of high-performance, high-quality new passenger car and

aftermarket tires. In addition to reducing the rolling resistance and improving the quietness and safety of tires, which results in the reduction of CO<sub>2</sub> emissions from passenger cars, we will fulfill our responsibilities as a tire

#### **Results in FY2022**

#### **GT300 Class Series Champion**

A car using Yokohama Rubber's global flagship tire brand ADVAN won the series championship for the first time in two years in the GT300 class of the 2022 SUPER GT, Japan's highest level touring race.

The ADVAN racing tires provided by Yokohama Rubber were a powerful ally in helping the car recapture the title thanks to excellent grip and handling stability.



#### **Pikes Peak International Hill Climb Overall Champion**

At the 100th Pikes Peak International Hill Climb, a car with ADVAN tires won the overall championship for the first time in two years. In this traditional hill climb race that has been held since 1916, our tires demonstrated our high level of technical ability to achieve stable driving even in harsh conditions.

manufacturer by pursuing "exhilarating driving experiences" as a form of added value.



#### **Asia Cross Country Rally Overall Champion**

In the Asia Cross Country Rally 2022, a car with GEOLANDAR tires won the overall championship (4 of the 5 winning cars used GEOLANDAR). The tire's high off-road performance has been proven in many races.



#### **Future Issues and Measures**

In response to growing environmental awareness in the motorsports industry, Yokohama Rubber is developing racing tires using renewable and recycled raw materials. In the All Japan Super Formula Championship, we began supplying dry tires that use approximately 33% of sustainable materials from 2023, and we are developing them to further increase the ratio of sustainable materials. In addition, in 2022, we participated in a harsh hill climb race in the United States

with tires made of sustainable materials, and are promoting the development of technologies to reduce the environmental impact through actual races. We will continue to develop racing tires using sustainable materials to further improve the environmental performance of tires for production vehicles and contribute to the development of sustainable motorsports.

# **Financial Strategy and Shareholder Return Policy**



Under YOKOHAMA Transformation 2023 (YX2023), our medium-term management plan, we are working to further increase sales revenue and profitability while boosting our ability to generate cash through organic business growth. Aimed at achieving growth through our financial capital strategy, we continue focusing on four key issues; namely (1) increasing earnings power by exploiting existing businesses and exploring ways to address market changes, (2) improving capital efficiency by increasing the business asset turnover rate, (3) ensuring and sustaining financial stability by balancing growth investments with greater capital efficiency and reduced liabilities, and (4) building internal reserves while maintaining a stable dividend and allocating these funds to growth areas while maintaining an appropriate level of financial leverage.

#### **Progress of Medium-Term Management Plan**

Under YX2023, which kicked off in fiscal 2021, we aim to achieve our best performance ever by simultaneously pursuing the "Exploitation"

of strengths in existing businesses while "Exploration" to create new value in the Midst of a Once in a Century Transformation.

#### > Financial Position

(Billions of yen)

	FY2018	FY2019	FY2020	FY2021	FY2022
Sales revenue	650.2	650.5	551.1	670.8	860.5
Business profit	59.3	50.1	35.9	62.2	70.1
Business profit margin (%)	9.1	7.7	6.5	9.3	8.1
Operating profit	53.5	58.6	36.0	83.6	68.9
Operating profit margin (%)	8.2	9.0	6.5	12.5	8.0
Profit attributable to owners of parent	35.6	42.0	26.3	65.5	45.9
Total assets	855.8	907.6	860.4	985.0	1,151.1
Interest-bearing debt	260.4	239.9	207.8	177.2	238.7
Total liabilities	473.4	479.9	437.5	452.0	528.0
Equity	382.4	427.7	422.9	533.0	623.1
ROE (return on equity) (%)	9.5	10.6	6.3	13.9	8.1
D/E ratio (times)	0.70	0.57	0.50	0.34	0.39
Net D/E ratio (times)	0.61	0.51	0.43	0.26	0.27
ROIC (%)	6.1	6.5	4.5	8.2	5.2

In fiscal 2022, we recorded sales revenue of ¥860.5 billion and business profit of ¥70.1 billion as a result of efforts to improve the MIX, raise prices, and expand sales. With regard to capital efficiency, ROIC was 5.2% and ROE was 8.1% thanks to our initiatives to increase profitability and divest real estate holdings and cross-shareholdings. In addition, the D/E ratio stood at 0.39 times and the net D/E ratio 0.27 times, enabling us to secure sufficient debt capacity for growth investments. Even in an uncertain environment, our robust financial base was highly evaluated and we were able to raise funds in a variety of ways. The acquisition of Trelleborg Wheel Systems Holding AB

(TWS) was completed in May 2023 at an acquisition price of ¥307.2\* billion with the aim of strengthening our footprint in commercial tires. Based on a financial base supported by strong relationships with banks, we have reduced the cost of capital by raising funds for growth investments through bank borrowing within the range of appropriate financial leverage and achieved a sustainable enhancement of corporate value. In this manner, we have been able to secure investment funds in growth areas while maintaining a JCR credit rating of A+.

Data Section

\*The enterprise value was estimated at 2,074 million euro (using a performance-linked earn-out method)

# **Investments in Intellectual Capital and Human Capital**

The theme of YX2023 is to maximize corporate value by actively investing for future growth and balancing both profit growth and increased capital efficiency. In terms of investment in human capital, we have made digital investment for work style reforms, educational

investment, and recruitment investment, greatly transforming the way employees work over the past three years. We are investing in human and intellectual capital that will support the future of our business.

# **Strengthening Cash Management**

In terms of cash management, we will generate operating cash flow through solid operations and use the cash generated from asset disposals to repay debts to improve our financial position. While promoting existing businesses that maintain high utilization rates through "Exploitation" and "Exploration," creating operating cash flow

through early inclusion of TWS, and making growth investments (increasing production, improving MIX), we will curb investment cash flow by continuing to sell non-operating assets and reduce external debts by effectively utilizing the Groups funds, including TWS.

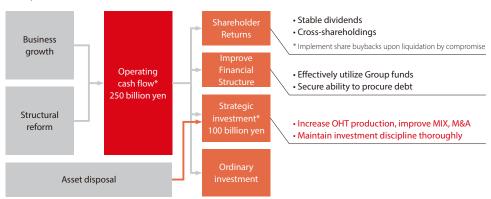
# **Funding and Capital Costs**

Fundraising is conducted by the most appropriate means, such as our own funds, borrowing, or the sale of assets, according to various conditions such as the timing and amount necessary for the business. When raising funds by increasing debt, it is our policy to

maintain financial discipline ensuring that our JCR issuer rating stays at A+. In addition, we calculate and determine the hurdle rate adopted for investment decisions for each individual project based on interest rates, country risk, and expected rate of return.

#### ➤ Capital Allocation

\* Cumulative total over three years (2021 to 2023)



earned from organic growth over the three years of YX2023 and cash from asset disposals, we will allocate funds in a well-balanced manner to growth investments, shareholder returns, and debt repayment. Specifically, cash will be allocated to investments, improving our financial position, and shareholder returns, and the maintaining financial discipline with a JCR issuer rating of A+, while optimizing liabilities and assets, as necessary.

Together with operating cash flow

# **Financial Strategy and Shareholder Return Policy**

# **Approach to Shareholder Returns**

We consider the improvement of TSR as an important management issue in order to enhance corporate value through the implementation of shareholder returns based on medium- to long-term business plans and appropriate stock price formation. We will continue to pay dividends while securing internal funds to implement capital investment and R&D, which are essential for maintaining market

competitiveness and improving earnings. Dividends will be determined by holistically taking into account performance trends, financial position, dividend payout ratio, and other factors. We are committed to paying continuous dividends and returning profits from business growth to our shareholders.

# > TSR (10 years, dividends included)



1 year		3 ує	ears	5 years		10 years		
Investment period	Cumulative/ annualized	Cumulative	Annualized	Cumulative	Annualized	Cumulative	Annualized	
Yokohama Rubber	+15.2%	+5.7%	+1.9%	-13.9%	-3.0%	+106.9%	+7.5%	
TOPIX	-2.5%	+18.1%	+5.7%	+17.2%	+3.2%	+174.2%	+10.6%	

<sup>\*</sup>Total shareholder return (TSR): Total rate of return on investment that combines capital gains with dividends

# **ROIC Management**

We have introduced ROIC as a business management indicator. We are using it as an indicator of how much profit we were able to generate from the funds invested in our business. In order to improve ROE and enhance corporate value, it is necessary to exceed WACC,

which is the cost of raising investment capital, at the very minimum, and we are promoting management that is conscious of capital costs in addition to profitability.

<sup>\*</sup>TSR for Yokohama Rubber is calculated based on cumulative dividends and stock price fluctuations. TSR for TOPIX is calculated with a stock price index including dividends. (Created by Yokohama Rubber using Bloomberg data and other sources.)

<sup>\*</sup>TSR values are index numbers calculated by setting the market closing price as of December 31, 2012 as 100. (Holding period ends December 31, 2022)

# **Ensuring Financial Stability**

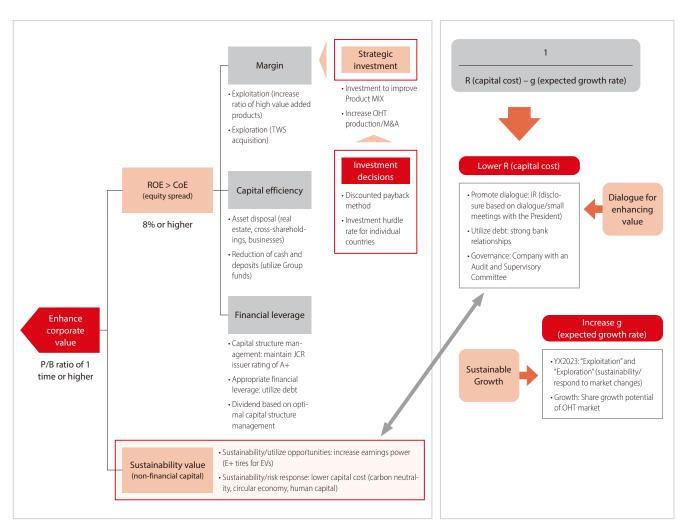
Ensuring the stability of our financial base is an important management issue. We have set a financial target to keep our D/E ratio at less than 0.4 times, and while maintaining a JCR credit rating of A+ as a financial discipline, and we are returning profits with an awareness of shareholder returns, such as via growth investments and stable dividends. Our ability to generate cash has steadily improved, and we have secured sufficient debt capacity for growth investments.



# Importance of Dialogue with Markets

We place importance on dialogue with the capital markets, and we believe that it is necessary to fulfill our accountability to shareholders and to demonstrate that our shareholder returns are appropriate. It is also important to obtain perspectives, suggestions, and advice from the capital markets through dialogue.

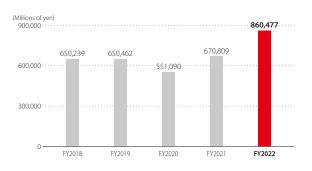
Going forward, we will need to examine how corporate value is formed with intangible assets such as human capital and intellectual assets, and how non-financial capital is linked to financial value. We hope to build relationships of trust with the capital markets through engagement.



# **Financial & Non-Financial Highlights**

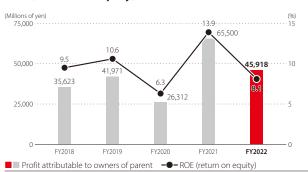
# **Financial Highlights**

#### Sales Revenue



Sales revenue increased 28.3% year on year to ¥860,477 million, reflecting increased production by automakers, and acquisition of new models in North America in the tire business and record-high sales and profits in the OHT business, as well as the ongoing depreciation of the yen.

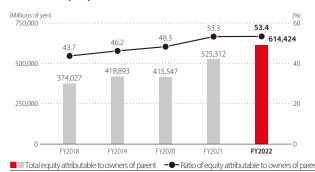
# Profit Attributable to Owners of Parent / ROE (Return on Equity)\*1



Profit attributable to owners of parent decreased 29.9% year on year, to ¥45,918 million due to extraordinary factors such as the sales of the head office and the Hamatite business. ROE (return on equity attributable to owners of parent) decreased 5.8 points year on year to 8.1%.

- \*1 ROE (Return on equity) = Profit attributable to owners of parent / Average\* total equity attributable to owners of the parent  $\times$  100
- \* Simple average of amounts at beginning and end of year

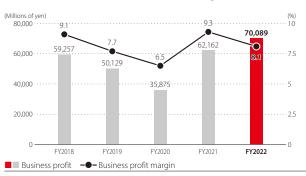
# Total Equity Attributable to Owners of Parent / Ratio of Equity Attributable to Owners of Parent\*<sup>3</sup>



Equity attributable to owners of parent rose ¥89,112 million compared with the end of the previous fiscal year to ¥614,424 million because of an increase in retained earnings and other components of equity. The ratio of equity attributable to owners of parent remained almost the same year on year at 53.4%.

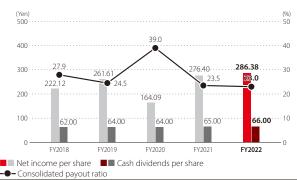
\*3 Ratio of equity attributable to owners of parent = Total equity attributable to owners of the parent / Total assets × 100

# **Business Profit / Business Profit Margin**



Business profit increased 12.8% year on year to  $\pm$ 70,089 million, in part reflecting the growth in OHT business, in addition to growth in overseas tire sales. The business profit margin fell 1.2 points year on year to 8.1% due to SG&A expenses increased by  $\pm$ 56,116 million from the previous year.

# Net Income per Share / Cash Dividends per Share / Consolidated Payout Ratio\*2

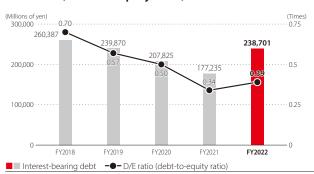


Net income per share was ¥286.38, an increase of ¥9.98 year on year. Cash dividends per share were ¥66.0, a ¥1 year-on-year increase. The consolidated payout ratio was 23.0%, a year-on-year decrease of 0.5 points.

Note: Net income per share and the consolidated payout ratio in fiscal 2021 are calculated based on an amount that excludes extraordinary factors such as the sales of the head office and the Hamatite business.

\*2 Consolidated payout ratio = Cash dividends per share / Net income per share

# Interest-bearing Debt / D/E Ratio (Debt-to-equity ratio)\*4

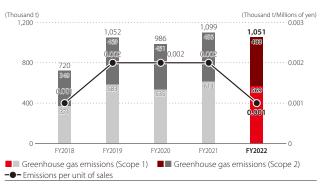


Interest-bearing debt increased ¥61,467 million year on year to ¥238,701 million. Interest-bearing debt as a percentage of total assets of the Yokohama Group was 20.7% (as of December 31, 2022). The debt-to-equity ratio (D/E ratio) increased 0.05 points to 0.39 times.

\*4 D/E ratio (Debt-to-equity ratio) = Interest-bearing debt / Total equity attributable to owners of the parent

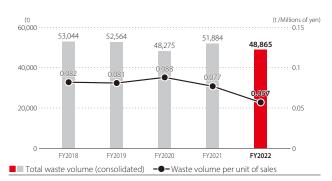
# **Non-Financial Highlights**

# Greenhouse Gas Emissions (Scope 1-2) (Consolidated)



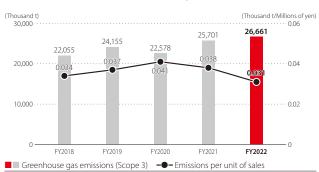
Greenhouse gas emissions (Scope 1 and Scope 2) decreased year on year, with Scope 1 emissions decreasing 7% and Scope 2 emissions decreasing 1% due to Group-wide reduction efforts despite 4% increase in tire production. Emissions per unit of sales improved 25% year on year for Scope 1 + Scope 2.

## **Total Waste Volume (Consolidated)**



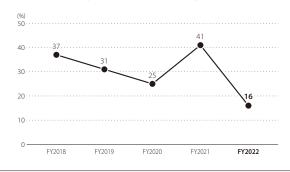
As a result of Group-wide efforts implemented on reducing waste, total waste volume decreased 7% year on year. Waste volume per unit of sales improved 6% year on year.

## Greenhouse Gas Emissions (Scope 3) (Consolidated)



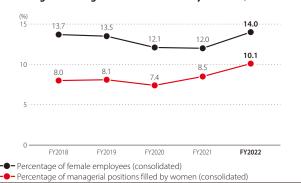
Greenhouse gas emissions (Scope 3) increased 4% year on year along with the increase in tire production volume. Emissions per unit of sales improved 19% year on year.

# Percentage of Women Employed in Comprehensive Work Positions (Non-Consolidated)



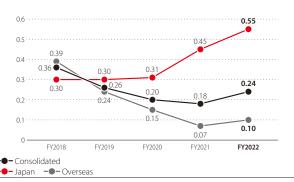
The percentage of women employed in comprehensive work positions (non-consolidated) decreased 25 points year on year because of a significant increase in overall number of new hires for comprehensive work positions since last year, and of which the number of women hired has increased slightly.

# Percentage of Female Employees (Consolidated) / Percentage of Managerial Positions Filled by Women (Consolidated)



The Yokohama Rubber Group positions the promotion of active participation by women as one of the important measures. The percentage of female employees (consolidated) rose 2.0 points year on year. The percentage of managerial positions filled by women (consolidated) increased 1.6 points year on year.

# Lost-Time Injury Frequency Rate (LTIFR)



Despite ongoing efforts on occupational health and safety to reduce the LTIFR globally, the LTIFR increased to 0.24.



# Yokohama Rubber's Sustainability

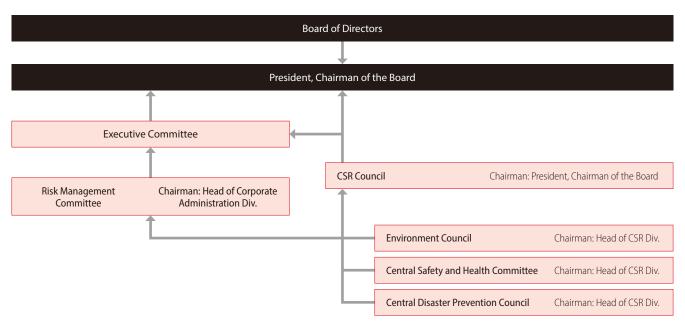
Having formulated the CSR Management Vision "To build a trusted identity as a contributing member of the global community," the Yokohama Rubber Group cooperates with stakeholders throughout the world while developing its business activities. Under the CSR slogan "Caring for the Future," we promote initiatives in line with material issues to ensure that contributions to social issues through business activities lead to the sustainable enhancement of corporate value.

## Governance

The CSR Council, chaired by the President and Chairman of the Board, and attended by all internal directors (including internal Audit & Supervisory Committee members), is held twice a year in May and November to draft and discuss CSR issues related to the environment, occupational health and safety, disaster prevention, quality, social contributions, and other issues that must be addressed by the

Yokohama Rubber Group. The Environment Council, Central Safety and Health Committee, and Central Disaster Prevention Council have been established as meeting bodies to formulate and examine individual CSR issues, as well as to formulate and execute more detailed plans and measures. Serious and urgent CSR matters are handled with cooperation from the Risk Management Committee.

#### > CSR and sustainability promotion structure



## Strategy

In 2008, Yokohama Rubber established its CSR Management Vision and CSR Action Guidelines to promote CSR and sustainability management, establishing the CSR Div. as the responsible division. Further, in 2014, we formulated the Yokohama Rubber Group Action Guidelines based on the 10 principles of the United Nations Global Compact and other international norms, identified themes that

significantly impact or are of high interest to both Yokohama Rubber and its stakeholders as material issues, and implemented the PDCA cycle while making continuous improvements to achieve these ends. In 2017, on the occasion of our 100th anniversary, we formulated a CSR slogan with the aim of achieving further sustainable growth during the next 100 years.

#### **CSR Management Vision**

"To build a trusted identity as a contributing member of the global community"

#### CSR Action Guidelines

- Identify continually changing social trends.
- Ascertain the items that can contribute.

## Yokohama Rubber Group Action Guidelines

- We shall respect human rights inside and outside the company.
- We shall create workplaces that are safe and healthy.
- We shall harmonize our activities with the global environment.
- We shall provide safe and high-quality products and services.
- We shall conduct corporate activities with a high transparency and practice proper disclosure of information.
- We shall observe not only laws and regulations but also social norms.
- We shall aspire to harmony and prosperity with local communities.

#### CSR Slogan

"Caring for the Future"

#### Material Issues

- Products Deliver enjoyment and peace of mind.
- The Earth Leave a sound environment to future generations.
- People Build on each other's strengths.

• Community

Earn the confidence of our neighbors.

• Corporate Governance

• Act swiftly to earn affirm trust.

• Practice CSR in one's own work.

Lay a solid foundation for fulfilling social expectations.

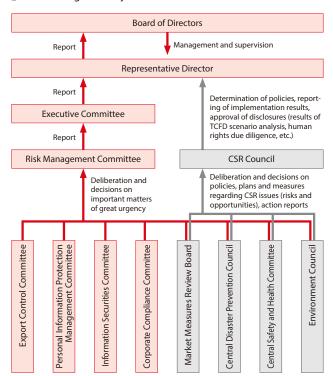
# **Risk Management**

To strengthen our defensive posture against the various risks surrounding the company, the Risk Management Committee, chaired by the head of the Corporate Administration Div., was established to manage company-wide, appropriately evaluate, and address risks with a significant impact on management.

Further, regarding risks with a high degree of importance, including environmental, occupational health and safety, disaster prevention, BCP, quality management and compliance, we have put in place a system for the focused management of risks that establishes divisions and meeting bodies specializing in overseeing each risk, thereby strengthening risk management systems within business activities.

The activities of the Risk Management Committee, Corporate Compliance Committee, and other committees are regularly reported to the Board of Directors, with the activities of other committees also reported to the Executive Committee as appropriate, and the Board of Directors when necessary.

# ➤ Risk management system



# **External Evaluations Related to ESG**









Selected for inclusion in the FTSE4Good Selected for inclusion in the FTSE Blossom Index Series for the 18th consecutive year. Japan Index for the 6th consecutive year.

Selected as a constituent of the FTSE Blossom
Japan Sector Relative Index.

Ranked among top A List companies in the CDP Climate Change Report for the fourth time in 2022.

# **Respect for Human Rights**

## Related material issue

## **Initiatives**



Respect for human rights (dissemination of the Human Rights Policy, implementation of human rights due diligence, and development of
grievance mechanisms)

#### **Basic Approach**

Human rights are fundamental rights afforded to all people, and since the Yokohama Rubber Group's business involves a very large number of people through its supply chain, there is a wide range of human rights that must be respected. With the globalization of our business activities, our interactions with various people have increased, and the possibility of having a direct or indirect impact on human rights violations has also increased.

For this reason, we believe it is important to fulfill our responsibility to respect human rights while considering the area of impact. Accordingly, we have established the Yokohama Rubber Group Action Guidelines, which stipulate that human rights should be respected both inside and outside the company and define actions to be taken by employees.

Furthermore, based on the United Nations Guiding Principles on Business and Human Rights (UNGP)\*, we have formulated the Yokohama Rubber Group Human Rights Policy and are promoting initiatives aimed at respecting the human rights of all people involved in our business activities. The Yokohama Rubber Group recognizes the importance of implementing Group-wide efforts to respect human rights as the basis of our business activities in order to contribute to the realization of a sustainable society as a company that is widely trusted by society.

\*The Guiding Principles on Business and Human Rights (UNGP) were approved by the United Nations Human Rights Council in 2011 as a framework for respecting human rights applicable to all nations and all companies. The Guiding Principles position "the responsibility of companies to respect human rights" and "the obligation of states to protect human rights" as important pillars of this effort.

# **Respect for International Human Rights Norms**

The Yokohama Rubber Group supports and respects the International Bill of Human Rights, including the United Nations Universal Declaration of Human Rights, the UNGP, the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, which stipulates fundamental work rights (freedom of association, the right to collective bargaining, prohibition on forced labor, effective abolition of child labor and the elimination of

discrimination in employment and occupations), and the ILO MNE Declaration (Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy).

Further, the Yokohama Rubber Group Human Rights Policy has been formulated based on the United Nations Guiding Principles on Business and Human Rights.

# The Yokohama Rubber Group Human Rights Policy

Formulated in April 2022, the Yokohama Rubber Group Human Rights Policy is the foundation of all Group business activities, positioned as the preeminent policy on human rights based on the Corporate Philosophy and the Yokohama Rubber Group Action Guidelines.

The Human Rights Policy applies to all officers and employees of the Yokohama Rubber Group companies (directors, corporate officers, and others involved in the execution of management-related duties, as well as those who have employment contracts with Yokohama Rubber Group companies, employees accepted on secondment and temporary employees).

# Yokohama Rubber Group Human Rights Policy (Summary)

- 1. Positioning of the Human Rights Policy
- 2. Respect Human Rights
- 3. Implementation of Human Rights Due Diligence
- 4. Issues Related to Human Rights
- Discrimination
  - Harassment
  - Forced labor and child labor
- Freedom of association and right to collective bargaining
- Occupational health and safety
- Impact on local communities
- 5. Grievance Mechanisms
- **6.** Education
- 7. Information Disclosure

Yokohama Rubber Group Human Rights Policy https://www.y-yokohama.com/global/sustainability/people/human\_rights/policy/

# **Human Rights Due Diligence Initiatives**

Based on the Yokohama Rubber Group Human Rights Policy, the Yokohama Rubber Group develops and strengthens its human rights due diligence system and conducts human rights due diligence on a regular basis to confirm that it is meeting its responsibilities to respect human rights and that business operations are being executed properly.

#### Fiscal 2022 initiatives

In fiscal 2022, we conducted the following self-assessments based on the human rights issues identified through inspections at Yokohama Rubber Group business sites and discussions with experts during the Human Rights Policy formulation process.

# Assessments Related to Employees Working at the Shimbashi Head Office

Targets Yokohama Rubber Group employees working at the Shimbashi head office

Main human rights issues Discrimination, harassment, and occupational health and safety

Given the wide range of attributes possessed by employees working for the Group and the diversity of the work in which they are engaged, we recognize the above human rights issues as potential and important risks, and have taken measures to address them. The following issues were identified during the fiscal 2022 inspection.

- Human rights education: Insufficient awareness of the Human Rights Policy
- Occupational health and safety: Insufficient efforts to collect feedback from employees through workplace environment surveys, and other means
- Grievance mechanisms: Although complaints received by consultation services are handled appropriately, the efficacy of these services has not been sufficiently verified

We will rectify and respond to these issues going forward in order to resolve them.

# Assessments Related to Workers at a Natural Rubber Plantation in Thailand

People working at a Surat Thani province natural rubber plantation in southern Thailand

Main human rights issues
Forced labor and child labor, impact on local community

Smallholders plantations engaged in natural rubber production pose the greatest human rights risks in the Yokohama Rubber Group supply chain. By the end of December 2022, the Yokohama Rubber Group had visited and conducted interviews at 437 farms in Surat Thani, a province in southern Thailand where natural rubber processing subsidiary Y.T. Rubber Co., Ltd. (YTRC) is located. Although we did not identify any farms with problems related to work environment, illegal development, or deforestation, we will consider improving survey methods and expanding the survey scope in the future.

# Development of a Grievance Mechanisms Related to Human Rights

# Grievance mechanism for Yokohama Rubber Group employees in Japan

As human resources and workstyles become more diverse, we recognize the importance of having a point of contact for direct consultations on a wide range of human rights issues.

In Japan, the Corporate Compliance Dept. established two consultation services, the Corporate Compliance Hotline and the General Counseling Room, to directly receive complaints and consultations. In addition, Compliance Promotion Managers are assigned to all divisions and affiliated subsidiaries, establishing a network connecting human rights-related complaints and consultations of members\* to the Corporate Compliance Dept. The Corporate Compliance Dept. and HR Dept. work together to resolve human rights-related complaints.

# Grievance mechanism for all stakeholders worldwide

The Yokohama Rubber Group is a member of the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER), which provides a non-judicial grievance settlement platform in accordance with the UNGP.

Through JaCER's Engagement and Remedy Platform, which commenced operations in October 2022, we have developed a system facilitating the receipt and appropriate response to complaints from all domestic and overseas Yokohama Rubber Group stakeholders. Verification of grievance mechanism system efficacy is reported to the Corporate Compliance Committee, which conducts evaluations, implements countermeasures, and monitors progress.

\* All personnel working for the Yokohama Rubber Group, including full-time employees, contract employees, temporary workers, and contractors.

Japan Center for Engagement and Remedy on Business and Human Rights (JaCER) complaint reporting platform https://jacer-bhr.org/en/application/index.html

# **Future Issues and Measures**

In fiscal 2022, we formulated the Yokohama Rubber Group Human Rights Policy, and implemented additional initiatives including the development of a grievance mechanism for complaints from all domestic and overseas stakeholders of the Yokohama Rubber Group. Further, as part of our human rights due diligence efforts, we conducted self-assessments with respect to two rights holders.

In fiscal 2023, we will conduct human rights risk assessments,

incorporating advice from external experts, to identify and evaluate negative impacts occurring in the Yokohama Rubber Group supply chain, as well as expand and accelerate efforts to prevent and reduce human rights infractions at Yokohama Rubber Group business sites and in the supply chain in accordance with the UNGP and Japanese government "Guidelines on Respecting Human Rights in Responsible Supply Chains."



# **Diversity & Inclusion**

## Relevant material issue

## **Initiatives**



- Hiring regardless of attributes such as nationality, sexual or gender identity (LGBTQ+\*), educational background and experience
- Respect for work life balance
- Support for diverse work styles
- \* LGBTQ+: An acronym that refers to sexual minorities, including those identifying as lesbian, gay, bisexual, transgender, queer/questioning (people whose sexual orientation and gender identity are uncertain), with the + sign referring to a diverse group of people that are not defined by the above definitions.

# **Basic Approach**

At the Yokohama Rubber Group, we believe it is important to further promote diversity in human resources through encouraging our people to embrace various work styles, promote work styles that are not bound by conventional rules and ways of thinking, and establish workplaces that enable employees to work together with a sense of pride and fulfillment.

To meet this goal, we conduct hiring regardless of attributes such as nationality, gender or sexual or gender identity, educational background or experience, and strive for the most optimal human resources placement aimed at achieving the business and technical strategies of YX2023.

Moreover, we strive to be a workplace that fosters the continued growth of all employees and enables career development by respecting work-life balance and embracing diverse human resources and styles of work.

# **Activities of the Diversity & Inclusive Promotion Taskforce**

At Yokohama Rubber, we have worked to implement various measures and expand various programs under the policy of "embracing diverse styles of work and striving to become a company of long-term careers." In 2016, we established the Women's Participation and Advancement Taskforce. It was later renamed in 2019 as the Diversity Promotion Taskforce, and once again renamed in 2023 as the Diversity & Inclusion Promotion Taskforce to coincide with an expanded scope of activities. The promotion taskforce strives to implement activities on a further broadened scope to improve productivity by diverse members (young generation, seniors, women, LGBTQ+, persons with disabilities, etc.) and create new values that extend conventional boundaries.

In order to achieve diversity and inclusion in an organization, it is also important to raise awareness among managers. To this end, we will continue to support career development for women, support balancing work with childcare and family care, and support for the active participation of people with disabilities and LGBTQ+ while systematically implementing diversity management training in the diversity promotion program for managers.

Through the activities of the Diversity & Inclusion Promotion Taskforce, we aim to foster a culture of embracing a variety of work styles by our diverse workforce and evolve into a company that provides all employees with job satisfaction and long-term careers.

## > Examples of diversity related training

	2019		2020	2021	2022
Nur	mber of programs	16	8	17	15
Т	otal number of participants	503	214	327	181
	Diversity	Diversity program     Management of diverse human resources	Enhanced management of diverse human resources	Enhanced management of diverse human resources     Participation in wwP*	Diversity training     Enhanced diversity management     Participation in wwP
programs	Women's career development	Encouragement     Career advancement     Skills training	• Encouragement • Business skills training	Encouragement     Business skills training	• Leadership for women
Main prog	Support for work-life balance	Career development for employees returning to work Supervisors of employees returning to work Mothers-to-be gathering	Career development for employees returning to work Networking sessions for working parents	Career development for employees returning to work     Individual consultation for working parents	Career development for employees returning to work     Individual consultation for working parents
	Healthcare	Breast cancer/sleeping aid     Prevention of work severances through nursing care commit- ments	COVID-19 preventive measures	Prevention of turnover due to nursing care/nursing care finances	Post-partum care class support

<sup>\*</sup> wwP: work with Pride (refer to page 46)

#### Main initiatives in fiscal 2022

In fiscal 2022, we implemented the Diversity Management Program as a program to promote diversity among those in managerial positions, a leadership seminar for women, and young employee

development program. In addition, we also created a training video and shared it internally to enhance understanding of changes in the childcare leave system and encourage male employees to take childcare leave.

# **Systems for Supporting Diverse Work Styles**

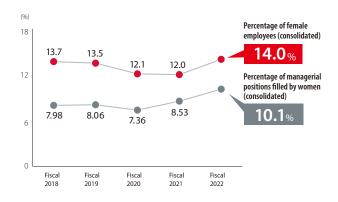
We have established a system that enables employees to be successful at work regardless of time or place by expanding the working system and improving work-life balance, such as with the expanded work-from-home scheme, flex-time system that eliminates core working hours, and shortened working hours. In addition, we aim to

establish a work system that allows employees to continue building their career along their personal life events, such as family care or childcare, by expanding the systems for childcare leave, family care leave, spouse accompaniment leave, and career return.

System	Detail
Childcare Leave System	For employees with children under 1 year of age (or under 2 years of age if certain criteria are met), we offer 10 days of childcare leave that can be taken by the day to meet diverse childcare support needs (Childcare Leave B) and Post-partum Paternity Leave that allows an employee to work while on leave (Childcare Leave C) in addition to statutory childcare leave (Childcare Leave A).
Family Care Leave System	Family care leave is for employees who need to provide constant care to a family member, which can be taken up to a year in length and divided into ten separate portions.
Work-From-Home and Home Office Schemes	In addition to the work-from-home system, which promotes work-life balance including need for balancing work with childcare or family care, enhanced work efficiency, prevention of prolonged time commitment (health concerns), and alleviation of commute stress, Yokohama Rubber has also introduced the home office scheme in which the Company subsidizes the setup of a home office in an employees' residence to make it their base of work operations for those facing long-distance commuting or moving to accompany a spouse on a job transfer.
Shortened Working Hours	Employees with children up to the sixth grade or family members requiring care can apply for shortened working hours.
Career Return System	A system that allows employees who have taken leave or retired to accompany their spouse on a job transfer, or who have retired due to childcare or nursing care, to return to work.
Paid Leave Taken by the Hour	This system allows employees to take annual paid leave in hourly increments in aiming to promote work-life balance.
Re-Employment of Employees 60 Years of Age and Older	The system enables employees to continue working and hold an official position after mandatory retirement age of 60 until up they turn 70 years of age.

# **Promotion of Women's Participation**

We strive to create a female-friendly work environment through expanding and implementing a variety of systems and initiatives to enhance the percentage of women in managerial positions. As of December 31, 2022, the percentage of managerial positions filled by women at Yokohama Rubber was 1.73% (10.1% Groupwide). However, we are seeing more female managerial position candidates among those who joined the company since fiscal 2007, when the percentage of women in new graduate hires surpassed 20% for the first time. Going forward, we expect the number of managerial positions filled by women to increase. We also utilize an early promotion system with the aim of further facilitating the success of female management personnel.

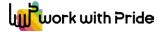


# **Employment of Persons with Disabilities**

Regarding t the employment of persons with disabilities, to date we have focused on jobs in which people can succeed within our existing operations regardless of disability and have periodically accepted new graduates at each business site. Moreover, Yokohama Peer Support was established in 2012 as a subsidiary to create places of employment for persons with disabilities. As of December 2022, the subsidiary employed 39 people with intellectual disabilities. Going forward, we will continue to develop new business operations as we broaden the scope of employing persons with disabilities.

# **Initiatives for Sexual Minorities**

Yokohama Rubber is a participating member of work with Pride, a volunteer group that supports the promotion and instilment of diversity management relating to sexual minorities such as LGBTQ+ in the workplaces of companies, groups and other entities. In 2022, we conducted a workplace LGBTQ+ awareness survey in collaboration with other participating companies.



# **Future Issues and Measures**

Since overseas sales accounts for 70% of total sales for the Yokohama Rubber Group, in order to stay ahead of our global competition, we are working to ensure that local human resources who are fluent in the local language and well versed in local culture play an active role in our operations, and that there is diversity in the company's core human resources. To this end, promoting diversity in management positions (employment of women, foreign nationals, and mid-career hires) will be a focus for the future. Moreover, the Group will further develop its workplace environment to enable foreign nationals to actively participate at work in domestic business sites.

Special Feature

**Promoting the Active Participation of Women** at Production Sites in India

The Yokohama Rubber Group has four production sites in India, comprising the YOKOHAMA Off-Highway Tires (YOHT) Dahej, Visakhapatnam, and Tirunelveli plants, which produce off-highway tires (OHT), and Yokohama India Pvt. Ltd. (YIN), which produces passenger car tires (PCR). Although

# Initiatives at Production Sites in India

According to the World Economic Forum (WEF) Global Gender Gap Report for 2023, India's ranking on the "Economic Participation and Opportunity" gender gap subindex is low at 142 out of 146 countries, with women's employment opportunities in India rated as limited. With respect in particular to tire production in India, it is common practice that nearly 100% of workers on the production floor are men.

In this social environment, the Yokohama Rubber Group has promoted the hiring of female employees at production sites in India while pursuing the creation of work environments in which women can easily engage in work under a policy aimed at mutually recognizing the diversity of human resources and workstyles with the aim of becoming a company where employees can work comfortably over the long term.

At production sites in India, the first female employee was hired at the YOHT Dahej plant in 2018, followed by the other three sites, which began hiring female employees sequentially from 2021 onward. As a result, the percentage of female employees at all production sites in India has increased from 0% at the end of December 2017, to 12.5% at the end of December 2022, and is expected to exceed 20% by the end of 2023.

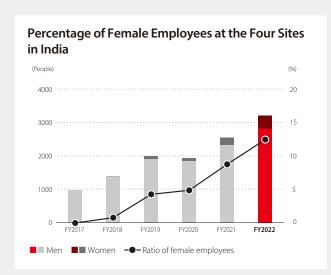
The Skill Development Center, established onsite at our plant, has also been successful in providing vocational training, and as of the end of December 2022, more than 200 female employees were engaging in various tire production at the YOHT Dahej plant, which was one of the first to begin hiring female employees in 2018. At YIN, the ratio of female employees was 0% at the end of December 2021, but reached 12% at the end of December 2022, and has subsequently continued to increase. The YOHT

employment opportunities for women are still limited in India, the Yokohama Rubber Group proactively recruits women at its production sites, substantially increasing the ratio of female employees.



# Women-only Production Lines

Visakhapatnam plant, which commenced operations in August 2022, is focusing on recruiting female employees with the goal of increasing the ratio of female employees from 17% at the end of December 2022, to 40% by the end of 2025.





YIN employees

At the YOHT Dahej plant, a truck and bus tire production line exclusively for female employees has been in operation since 2018, and approximately 70 female employees are currently engaged in tire production on this line. In the past, the handling of tires was considered unsuitable for women due to tire sizes and weights, and most production facilities were designed for the male physique and physical strength. However, revisions to the size and height of production facilities and the introduction of lightened workloads have expanded opportunities for female employees to play active roles. We are proactively increasing the number of female employees at each of our plants, and plan to

provide further opportunities for women to play active roles by increasing the number of women-only production lines, developing female production line managers and leaders, and expanding leadership education.



Data Section

Women-only production line at the YOHT Dahej plant

## Future Issues and Measures

Although employment opportunities for women in India are still limited, in recent years, women have been making social advances and employment opportunities are expanding. Given the growing importance of Yokohama Rubber Group production sites in India, from the perspective of securing talented human resources, we will further promote the creation of workplace environments that are comfortable for women, increase the number of female employees, and develop female managers and leaders to ensure our production sites can thrive amid global competition.

# **Work Style Reforms**

## Relevant material issue

# Initiatives



- Promoting work styles free from the constraints of place or time
- Supporting work-life balance and diverse work styles

#### **Basic Approach**

Achieving sustainable growth amid drastic changes in the operating environment requires improving the value of human capital. Yokohama Rubber is promoting work style reforms so that its diverse workforce can maximize their abilities in their respective fields by creating work styles free from conventional rules and ways of thinking, and creating a comfortable work environment where they can work together dynamically. By respecting work-life balance and embracing diverse work styles, we support the continued growth of all employees and their career development while balancing work and life.

# Promoting Work Styles free from the Constraints of Place or Time

In March 2023, Yokohama Rubber relocated and integrated its Head Office from Minato-ku, Tokyo to the Hiratsuka Factory in Hiratsuka City, Kanagawa Prefecture, with the aim of improving operational efficiency through function integration and reforming work styles. We will expand the application of various systems such as the work-fromhome scheme to establish a work system compatible with various situations, and realize integrated operations of planning, production, sales, technology, and logistics, as well as faster decision-making.

# Home office scheme

Following the integration of the Head Office and Hiratsuka Factory, we introduced a home office scheme where employees who end up having to commute long distances or who move to accompany a spouse on a job transfer will have offices developed at their homes at the Company's cost and will basically work from home without maintaining a fixed desk at the office. As of July 2023, 109 employees are working under this scheme. By promoting work styles free from the constraints of location, we will strive to build the foundation for diverse workforce to maximize their abilities.

#### Establishment of the Tokyo Office and the Satellite Office

In connection with the integration of the Head Office and Hiratsuka Factory, we established the Tokyo Office and the Satellite Office at Shinagawa Intercity. The Tokyo Office houses the Head Offices of Yokohama Tire Japan and Yokohama Rubber MB Japan along with some

of the sales departments of Yokohama Rubber. Satellite offices using hot desking are intended to promote improved communication between our people.

#### Upgrading of work-from-home and flexible work systems

In 2018, we introduced the work-from-home system with the goal of promoting work-life balance in terms of childcare or family care, increasing operational efficiencies and preventing prolonged time commitments for work (health concerns). From 2023, we expanded the conditions so that employees can use it to cut down on the time they spend commuting. At the same time, we abolished the usage limit and shifted to the most suitable telecommuting operation for each workplace according to work (results and efficiency). In addition, we have applied a flextime system to all staff employees in principle, abolished core working hours, expanded the shortened working hours and flextime systems, and established a system that enables employees to produce work results regardless of location or time.



New dual purpose conference room and cafeteria in Hiratsuka

# **Future Challenges and Responses**

In order to achieve our Medium-Term Management Plan, we must create a workplace in which all employees can play an active role. Taking advantage of the major changes in work styles resulting from the COVID-19 pandemic, we will create a workplace where our people can work regardless of time or place by expanding their work

style options. Going forward, we will continue to contribute to the enhancement of corporate value by further increasing the level of our efforts, recruiting and retaining talented human resources and improving the performance of individuals and organizations.

# **Human Resources Development**

#### Relevant material issues

## **Initiatives**



- Developing and selecting value-added human resources
- Assigning the right people to important positions

#### **Basic Approach**

For the global Yokohama Rubber Group, assigning "professional human resources" who maintain a strong willingness to achieve goals and broad perspective, and who demonstrate their capabilities while impacting those around them, is essential. To this end, we promote measures toward development and select talent, and ensure that the right people are placed in the right jobs. We provide a full-range of support to our people based on the belief that providing a place for employees to contribute and grow professionally will help to advance the company's development. We also work to secure and develop management-oriented human resources who can carry the company on their shoulders so that we can prevail amid global competition.

# **Human Resources Development Programs**

In order to respond to changes in the global business environment, the Yokohama Rubber Group is working to strengthen its human capital through human resource development. We provide training that adheres to the Three Reals Philosophy where employees learn through interaction

and experience with the aim of developing the mindset, abilities, and skills necessary to make the right decisions and execute, as well as individual skills such as rank-based leadership, the ability to solve problems closely related to the workplace, and presentation and negotiating skills.

Name	For	Cumulative number of	participants (fiscal 2022)	Details			
Name	rui	Men	Women	Details			
Training for new employees	Newly hired employees	23	8	With the aim of solidifying a foundation for future growth as a member of the Company, participants acquire the awareness needed as members of society and acquire basic knowledge common to administrative and technical work.			
Follow-up training for new employees	Employees in their second year	41	11	In addition to organizing and sharing what they learned during the business assignment and training period, participants transform their mindset ahead of their third-year as employees.			
Training for newly appointed managers	Managers	17	3	Participants understand and acquire the knowledge necessary for a managerial position, and are taught about the expectations, roles, and responsibilities required.			
Training for newly appointed personnel holding managerial positions	Managers	21	2	For the purpose of supporting adaptation to management work, participants gain a better understanding of the roles of organizational managers and acquire basic management knowledge and practice in the workplace.			
Training for evaluators	Managers	23	1	Through case studies, participants learn appropriate evaluation methods to prevent variation in evaluations and how to improve the degree of satisfaction in feedback interviews.			
Training prior to re-employment	Employees planning to be re-employed	36	4	In the midst of a major career transition, participants eliminate any concerns arising from their new assignment and reconsider how to approach work after re-employment.			

# **Developing Core Human Resources**

In order to support the achievement of the YX2023 Medium-Term Management Plan in terms of human resources, we have created a personnel system that allows employees to gradually acquire the skills required of core human resources. For managers, this is achieved by increasing the links between post, results and compensation, and for general career track employees by clearly indicating the added value (expected results and expected behavior) required for each level and linking these to the development system. At the managerial level, in 2020, we revised the system to further enhance the linkage between posts (jobs) and compensation. In

addition, for the general career track employees, in 2021, we introduced an early selection system that allows them to be assigned to managerial positions as early as the age of 30, which ensures that the right per-

Assignment of the right person to the right
position

Medium-term performance-linked
remuneration
Assignment of right person to the right high-level
Job-type system
(clear accountability and reflection of results)

Early promotion
Development and selection of value-added human resources

son is assigned to the right position regardless of age.

# **Future Issues and Measures**

In the development of Group companies in Japan and overseas, we will continue to create human resource development and skills development systems, and establish programs to produce high-performance human resources, in addition to developing young

employees. In addition, we are considering resuming employee surveys in the future with the aim of further promoting initiatives to enhance human capital and measuring the effectiveness of these initiatives.

# **Occupational Health and Safety**

## Relevant material issue

## **Initiatives**



- Creating a safe and healthy workplace
- Safety measures aimed at zero workplace accidents

#### **Basic Approach**

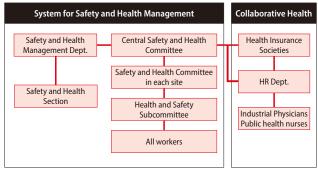
Occupational accidents within the Yokohama Rubber Group occur at a lower frequency than the averages across all industries and the manufacturing sector, but the number is still not zero, and when the causes of these accidents are analyzed, we recognize that many of them could have been prevented if measures had been taken in advance.

As it is necessary to handle large machinery at our production plants due to the nature of our business, defects in equipment specifications or incorrect operation can lead to serious accidents, and appropriate safety measures need to be taken. Additionally, with mental conditions accounting for an increasing proportion of long-term absences from work, we must properly look after the mental health of employees in addition to their physical wellbeing. The Yokohama Rubber Group strives to develop safe and comfortable workplaces and promote employee health, and also aims to foster a culture of safety to remove all hazards, and achieve zero occupational accidents.

# **Health and Safety Management System**

In Japan, under the Central Safety and Health Committee chaired by the General Manager of the CSR Division, each business site has its own Safety and Health Committee (statutory) and each division and workplace has its own Safety and Health Subcommittee. Safety and health activities are important initiatives common to both the company and the union, and we are promoting them in a united labor-management effort while sharing safety information with other companies and labor unions. In addition, to create a workplace where employees can work in good health for a long time, we promote health and physical fitness based on "Collaborative Health\*" in cooperation with health insurance unions. Each overseas company has its own system in place in accordance with the laws of each country. The Safety and Health Management Dept. coordinates health and safety activities in Japan and overseas.

#### > Health and Productivity Management Structure



<sup>\*</sup> Collaborative Health: An approach where health insurance societies and businesses actively collaborate to efficiently and effectively implement prevention and health development for insured employees based on a clear division of roles and a good workplace environment.

# Initiatives to Improve Occupational Health and Safety

#### **Enhancing equipment measures**

We systematically and continually conduct risk assessments for all facilities and operations, and implement safety measures for prevention from the facility side. To this end, we operate a system for monthly follow-up on the number of risks and improvements. Top safety diagnoses are

conducted by directors at our domestic plants. We are also strengthening the horizontal deployment of accident countermeasures to prevent the occurrence of similar accidents.



Safety diagnosi

#### Developing safety-conscious human resources

We aim to develop people with the sensitivity to perceive hazardous

events as dangerous. To this end, we implement hazard prediction training (KYT), which all employees practice every day, Hiyari-Hatto (near-miss) detection and improvement activities, which are voluntary activities with the participation of all employees, and training at the "Taikan Dojo" (experiential training to prevent accidents). In addition, we



Overseas factory safety personnel experiencing hands-on training (Experiencing using stairs while carrying a package)

continue to promote safety education that emphasizes communication, where supervisors talk with workers one-on-one to get them to understand the meaning of each task and are able to act more safely and independently.

In addition, as colleagues who work together, we encourage our partner employees to participate in these activities to prevent the occurrence of accidents and improve their safety level.

#### **Development of standard work manuals**

We are systematically and continually conduct open work observation to identify all unsafe behaviors and areas of insecurity, and to developing standard work manuals. In workplaces where foreign workers are employed, the standard work manuals are also written in the workers' native languages.

## Promoting both physical and mental health

Mental health initiatives include managing working hours through an attendance management system, work improvement and interview guidance for those working long hours, and education to improve communication skills, such as workshops on listening techniques. For employees who have been absent from work for a long period of time due to mental health issues, we conduct an interview with the employee, then check with the attending physician, industrial physician, public health nurse, and workplace to determine the method, timing, work restrictions, etc., before allowing the employee to return to work in a planned manner. After returning to work, regular meetings are held between the employee, the occupational physician, and the workplace, and the restrictions on work are lifted one by one until the restrictions are completely removed.

We also conduct activities to help employees quit smoking and hold seminars on physical fitness in order to promote health.



Stress check workshop at the Onomichi Plant

## Improvements in workplaces

We have promoted the maintenance of equipment and provision of personal protective equipment, improvement of work methods, and maintenance management to maintain comfortable conditions based on work environment measurements. In addition, based on the 5Ss (seiri [tidiness], seiton [being organized], seisou [cleanliness], seiketsu [hygiene], and shitsuke [discipline]) activities, we are promoting manufacturing that produces only what is needed, when it is needed, without any areas of insecurity.

In recent years, we have experienced life-threatening heat, and we think of heat stroke as a accident that can lead to death just as injuries do, so we are measuring WBGT (WetBulb Globe Temperature, a heat index) values in the workplace and working to lower these values, such as by discharging hot air.

#### **Prevention of traffic accidents**

At each of our locations, we hold traffic safety seminars by local police departments and conduct educational activities in cooperation with traffic safety-related organizations. In addition, we are working to raise traffic safety awareness through education using drive recorders and by calling out to people at the front gate.

#### Establishment of a safety and health platform

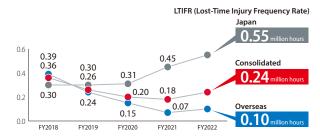
Eighteen sites in Japan and overseas have acquired occupational health and safety management system (JISHA/OSHMS/ISO45001) certification, and eight sites renewed their certification in FY2022. (The certification of other business sites is still ongoing.)

We will continue to improve our management system and implement the PDCA cycle - Plan, Do, Check, and Action - to enhance our safety and health infrastructure.

The frequency of occupational accidents (consolidated) was 0.24. We will continue our efforts to achieve zero accidents and zero risk.



Occupational safety and health management system (OSHMS) renewal audit at the Hangzhou Plant (China)



## **Future Issues and Measures**

Despite our various initiatives to create safe and comfortable workplaces and promote health, we have yet to reach the goal of zero accidents.

We will promote facility measures focusing on isolation from hazardous sources, as well as training people to take safe actions.

# **Supply Chain Management**

## Relevant material issue

## **Initiatives**



**Community** 

- Ensuring fair, equitable and transparent business relationships
- Building strong partnerships with business partners
- Procuring sustainable natural rubber

#### **Basic Approach**

Being a company that continues to provide value to society requires strong partnerships with business partners. Additionally, the scope of corporate social responsibilities extends not only to our own company but also to business partners who we procure raw materials, goods, and services from that are necessary for our business activities. In particular, the upstream part of our business supply chain has many business partners in emerging and developing countries, so we recognize that evaluation from a social and environmental perspective is also important. In light of this situation, Yokohama Rubber has established the Yokohama Rubber's Basic Procurement Policy, with the slogan "To build relationships of trust based on equitable and fair trade in its aim for prosperity, and mutual development," along with the Yokohama Rubber Group Action Guidelines stipulating actions that employees should take.

CSR Procurement Guidelines

https://www.y-yokohama.com/global/csr/pdf/CSR\_Procurement\_Guidelines\_202210.pdf

## Initiatives for CSR Procurement

#### **CSR Procurement Guidelines**

In order to promote CSR activities in the value chain, Yokohama Rubber has formulated various guidelines such as the Yokohama Green Procurement Guidelines and CSR Procurement Guidelines, and has shared its policies and philosophy internally and with business partners through briefings. In 2012, we joined the United Nations Global Compact and are promoting global initiatives. In 2022, we reviewed the Yokohama Rubber Environmental Policy in light of changes in social conditions and other factors, and also revised the CSR Procurement Guidelines to further strengthen our efforts to respect the environment and human rights.

## **Environmental assessment of suppliers**

The Yokohama Rubber Group's mainstay products are mostly petrochemical products (chemicals), including various synthetic rubbers, and the manufacturing process may have adverse impacts on environmental pollution and the lives of local residents. From the perspective of stable procurement of raw materials and from an ethical perspective, we are focusing on the environmental assessment of

suppliers. We ask our suppliers, including new business partners, to comply with the Green Procurement Guidelines, and require them to conduct regular CSR self-checks and report the results.

# Social assessment of suppliers

Smooth communication with local residents where the Yokohama Rubber Group's manufacturing factories are located and the continuation of fair transactions are essential for sustainable business development. Moreover, ensuring a work environment where people involved in procurement can perform their job safely and respecting human rights are also important issues. From the above perspective, we assess whether our business partners comply with the Group's Code of Conduct and other guidelines, and if there is a significant adverse social impact, we ask them to take corrective action as part of our initiatives for improvement. In addition, we are committed to global procurement that takes into account impacts on human rights, the environment, and society, and are careful not to intentionally use minerals from conflict zones.

## Results of environmental assessments of suppliers

# Environmental impact assessment when starting a new business relationship

- $\cdot$  Confirmation whether new raw materials comply with environmental regulations
- Confirmation of environmental management system (ISO 14001) certification and management status of environmental impacts and greenhouse gas emissions, etc., through CSR self-checks

In fiscal 2022, none of our 58 new suppliers in Japan had adverse impacts on the environment.

## Results of social assessments of suppliers

# Social impact assessment when starting a new business relationship

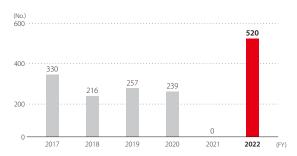
- Confirmation of fair and equitable transaction mechanisms and external communication mechanisms for newly adopted raw materials
- Confirmation of working conditions, initiatives to respect human rights, and the use of conflict minerals through CSR self-checks

In fiscal 2022, none of our 58 new suppliers in Japan had adverse impacts on society.

## **Holding of CSR Supplier Study Meetings**

We hold CSR Supplier Study Meetings to share our philosophy and policies related to sustainability. In 2022, we worked to develop a system for holding our first remote briefing, and held four webinars, with 520 companies participating. For suppliers of natural rubber, we held a Suppliers' Day to explain our procurement policy for sustainable natural rubber and call for their cooperation in CSR initiatives. At the same time, we are preparing to start similar activities for suppliers of our overseas bases.

## Number of companies participating in CSR briefings for business partners



Procurement Policy for the Sustainable Natural Rubber https://www.y-yokohama.com/global/csr/pdf/SNR2.0\_English.pdf

# Promoting Procurement of Sustainable Natural Rubber

## **Procurement Policy for Sustainable Natural Rubber**

Natural rubber accounts for around 20% of the raw materials used by the Yokohama Rubber Group, and as a raw material it is essential for us to provide customers with our products without interruption.

To make natural rubber a sustainable resource, Yokohama Rubber takes part as a founding member of the Global Platform for Sustainable Natural Rubber, which was launched in 2018 at the initiative of the Tire Industry Project as part of the World Business Council for Sustainable Development. In October of the same year, we also formulated our own Procurement Policy for Sustainable Natural Rubber. Y.T. Rubber Co., Ltd. (YTRC), a natural rubber processing company in Thailand, is working to promote CSR at its natural rubber plantations by including provisions such as environmental protection and human rights compliance in purchase orders.

Based on its Procurement Policy for Sustainable Natural Rubber, the Yokohama Rubber Group is working to establish traceability and protect human rights, labor, and environmental protection.

## Seminars for natural rubber farmers

As part of its sustainable natural rubber procurement activities, Yokohama Rubber holds networking events in each country, such as seminars and Suppliers' Day for natural rubber suppliers.

YTRC, which processes rubber in Thailand, regularly holds seminar events to improve the quality of natural rubber in collaboration with the Rubber Authority of Thailand (RAOT), which is under the jurisdiction of Thailand's Ministry of Agriculture and Cooperatives, in order to continuously support small farmers. At the seminar event in December 2022, 50 farmers in the Surat Thani district participated and were provided with 250 kg of fertilizer free of charge per farmer using

RAOT's knowledge. In addition, participating natural rubber farmers also cooperate in follow-up surveys on the physical properties and productivity of natural rubber.



Natural rubber farmers who attended the event

# **Establishment of Supplier Hotline**

For business partners, the compliance promotion managers of procurement and sales departments collect complaints and consultations regarding transactions through a business partner hotline and other means. When a complaint is filed, the Corporate Compliance Department confirms the facts and takes necessary measures in consultation with the procurement and sales departments.

In addition, the Yokohama Rubber Group is a member of the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER), and has established a system to receive complaints from all stakeholders in Japan and overseas through the JaCER's complaint reporting desk and to respond appropriately.

\*See\*Human Rights\* (p. 42) and \*Compliance\* (p. 70) for details.

# **Future Issues and Challenges**

The Yokohama Rubber Group has built relationships of trust with suppliers in the supply chain based on fair and equitable business practices, and has promoted collaboration, coexistence and

co-prosperity. Going forward, we will deepen global collaboration with overseas subsidiaries and build Group-wide partnerships.

# **Coexistence with Local Communities**

## Relevant material issue

## Initiatives



Community

- Supporting biodiversity preservation activities in local communities and medical assistance/educational
- Disaster prevention and relief activities in local communities
- YOKOHAMA Magokoro Fund and collaboration with NPO

#### **Basic Approach**

In the Yokohama Rubber Group Action Guidelines, the Yokohama Group declares that "We shall aspire to harmony and prosperity with local communities." Our basic stance is to always remember that we are a member of society, strive to achieve harmony and prosperity with society, build relationships of trust with stakeholders, support the social contribution efforts of employees and foster a corporate culture in which employees are willing to actively participate in social contribution activities.

As an entity that operates globally, the Yokohama Rubber Group endeavors to build good relationships with local communities in terms of the environment, laws, culture, customs and the economy.

# YOKOHAMA Magokoro Fund

The YOKOHAMA Magokoro Fund, which was established by employees in 2016, collects reserve funds from employees (members) who support the purpose of the fund (arbitrary amounts starting from ¥100 per month), and makes donations to support groups tackling social issues or as relief funds in the wake of disasters. Yokohama Rubber has also introduced a system to make donations of the same amount as a fund-matching gift.

As of December 31, 2022, around 44% of employees enrolled in the fund.



#### ➤ Support provided in fiscal 2022

In 2022, support provided by the fund totaled  $\pm 5,112,000$  (including disaster relief funds). The main recipients of support were as follows.

- Florence, a specified non-profit organization
- Kanagawa Myoelectric Prosthesis Bank (Kanagawa Rehabilitation Hospital)
- Chance for Children, a public interest incorporated association
- Humanitarian aid to Ukraine
- Offshore earthquake in Fukushima in March 2022
- Typhoon No. 15 in 2022

# **Contribution to Revitalizing Local Communities**

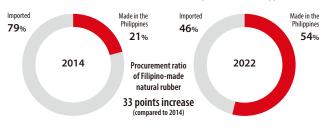
## Support for the Laojunshan Project (China)

Yokohama Rubber (China) Co., Ltd.), the umbrella company of Yokohama in China, has been supporting the Laojunshan Project since 2011. The project aims to preserve biodiversity in the Laojun Mountain Nature Reserve located in Lijiang, Yunnan Province. Laojun Mountain is a mountainous area surrounded by lush nature that was registered as a World Natural Heritage Site in 2003. The Laojunshan Project is an initiative that aims to preserve the ecosystem by transforming a village located in the nature reserve that previously could only make a living through deforestation into an agricultural and livestock production-based economy with access to financing via a "Village Bank."

Localization project aimed at local production for local consumption of natural rubber (Yokohama Tire Philippines, Inc. (YTPI))

In 2014, a localization project was launched at YTPI, which produces tires for passenger cars and SUVs in the Philippines, with the aim of revitalizing the local economy in the Philippines by procuring raw materials for tire production locally. With the ongoing project implementation, in 2022, natural rubber made in the Philippines accounted for 54% of the total rubber used in tire production.

#### Procurement ratio of natural rubber (Produced/imported to the Philippines)



Village Bank

# Promote participation of diverse human resources in overseas subsidiaries

Hangzhou Yokohama Tire Co., Ltd. (China), out of 141 total employees, six of whom are Japanese and eight of the managers are local staff. The ratio of female employees is approximately 30%. The company has a maternity leave system in place for employees to take leaves as necessary. The ratio of female managers with the rank of section manager or higher is almost 50%, while there is equal opportunity for both genders for advancement and promotion. Hiring is

conducted on a broad base in the Hangzhou area. The company offers equal opportunities in hiring and promotes employees fairly within the company regardless of gender, or places of origin.



Governance

Data Section

Employee recognition for 10 years of continuous service (Hangzhou Yokohama Tire Co., Ltd.)

# **Supporting Next-generation Development**

#### **Environmental education at Mie Plant**

Employees at the Mie Plant provide classes on the environment at local elementary schools and at the plant. It makes efforts to raise awareness of the nature and the environment through fun and games, including using a picture-story board to discuss the meaning of tree planting and hosting a root-removing event on the invasive species of cutleaf evening primrose. The plant also puts efforts into environmental preservation in the community through education,

including beach cleanup activities with the children.

In February 2022, the Plant received the Ikimono Kyosei Jigyosho® certification (ABINC certification) for its consideration for biodiversity.



Wildlife observation in the biotope for elementary school students

#### **Educational support for schools**

The Tirunelveli Plant of ATC Tires Pvt. Ltd. (ATG-TN), an India-based tire manufacturing subsidiary, is providing support for infrastructure development and digital education at multiple schools.

Moreover, Suzhou Yokohama Tire Co., Ltd. (CSZY), a subsidiary involved in tire manufacturing and sales of Yokohama Rubber in China, held a winter camp for environmental protection. The camp consisted of elementary school students and their families where they partici-

pated in lectures on protecting the environment and saving paper, collecting seeds and bird watching. The aim of the camp is to instill knowledge and increase environmental awareness among the children.



Educational support for elementary school in India

# **Disaster Recovery Support**

## Tire donations to the Japan Car Sharing Association

As part of Yokohama Rubber's efforts in supporting disaster recovery, the company donated a total of 200 passenger car tires to the Japan Car Sharing Association. The donated tires were installed on vehicles by students of Ishinomaki Senshu University in Ishinomaki City, Miyagi Prefecture as part of the student maintenance project in April and November, and used for car sharing and leasing in the disaster-stricken area.

The Japan Car Sharing Association provides non-profit car sharing in temporary housing and post-disaster housing, as well as vehicle

rental for regional development. It also provides support to people who have lost their cars due to natural disaster with free vehicle

rental for a limited period to rebuild their lives. Yokohama Rubber supports the Association's efforts and have been donating tires for passenger vehicles since 2015.



Students of Ishinomaki Senshu University installing Yokohama tires on passenger vehicles

#### **Future Issues and Measures**

With the expanded operations at overseas business sites, the penetration of the Code of Conduct among new employees to the Yokohama Rubber Group has become a new issue. In addition to yielding economic effects, it is also a task to establish a structure that enables collaborative efforts to resolve social issues faced by the

local communities through our business activities. In order to achieve resolution, we will promote volunteer activities that fit the new post-pandemic lifestyle and support through the YOKOHAMA Magokoro Fund.

# Information Disclosure Based on TCFD Recommendations



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.

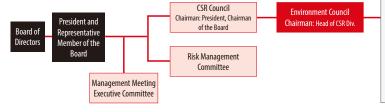
\*Task Force on Climate-related Financial Disclosures. The TCFD was established in 2015 following a request from the G20 for the Financial Stability Board (FSB) to consider climate-related disclosures and actions to be taken by financial institutions. The TCFD recommends that companies and other organizations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

## > Climate Change-Related Governance Support System



- Carbon Neutral Committee
   Chairman: Head of CSR Div.
- Biodiversity & YOKOHAMA Forever Forest Committee
- Chairman: Head of CSR Div.
- 4Rs Committee
- Chairman: Head of Research & Advanced
  Development Div.
- Chemical Substance Management Committee
   Chairman: Head of Research & Advanced
   Development Div.
- Tire Production Environmental Task Force Head: Head of Tire Production Div.
- MB Production Environmental Task Force Head: In charge of MB Production and Engineering
- Subsidiary Production Environmental Council Chairman: General Manager, Head of Environmental Protection Promotion Dept.
- Global Environmental Council Chairman: Head of CSR Div.

# 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

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.

# **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

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	
			Policies and regulations	Introduction and rise of carbon pricing	Large		
			Markets	Resource (raw material) price hikes and supply instability Increase in renewable energy and fuel prices (crude oil, natural gas)		Formulate and implement a roadmap to carbon neutrality	
	S	Transition to a				Promote "activities to reduce energy consumption by 1% per year" (improve)	
	risks	decarbonized society	Technologies	Capital investment to improve manufacturing process efficiency	Medium	equipment efficiency, optimize operations, review processing specifications, etc.)  • Expand use of renewable energy	
	tion r	,	Reputation	Impact on customer evaluation of emission reduction efforts and stance, and on stock prices	Small	• Introduce new energy technologies	
	ransition		перагасіон	Response to the global movement to promote the use of renewable energy (reputation among stakeholders)	Small		
Risks	_	Change in demand for products and services	Markets	Product selection based on evaluation of CO <sub>2</sub> emissions during manufacturing (competition within the same products)	Large	Promote carbon neutral manufacturing sites to achieve zero CO2 emissions during production	
		Response to changes in the automotive industry			Large	• Explore commercial tires enhancements, costs, services, and DX	
	Intensification of weather disasters due to	Acute	Raw material procurement difficulties and higher procurement costs due to supply chain disruptions		Diversify suppliers and raw material production sites     Strengthen manufacturing sites against windstorms, floods, and earthquakes,		
	risks	rising temperatures		Equipment damage or shutdown due to extreme weather		formulate BCP	
	Physical	Intensification of climate change	<b>.</b>	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	<ul> <li>Promote "activities to reduce energy consumption by 1% per year" (improve equipment efficiency, optimize operations, review processing specifications, etc.)</li> </ul>	
	n	decarbonized society	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	<ul> <li>Increase installation of EV-compatible tires on new vehicles</li> <li>Expand sales of "E+" mark EV-compatible tires</li> </ul>	
oi.		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	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 CO <sub>2</sub> emissions during manufacturing	
Č	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

Scenari	io Conditions	1.5°C Scenario	4°C Scenario		
Scenario o	verview	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		
Analysis results		Mainly transition risks/opportunities are manifested.  [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 Increased 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	Mainly physical risks/opportunities are manifested.  [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 prevention, recovery, and temperature fluctuations		

Metrics and Targets

# **Metrics and Targets**

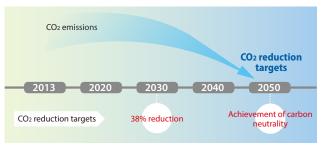
 $https://www.y-yokohama.com/global/sustainability/environment/tcfd/\#indicators\_and\_targets$ 

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,

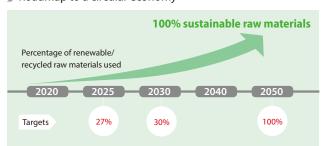
water usage, waste volume, and YOKOHAMA Forever Forest and biodiversity conservation activities are disclosed on the Yokohama Sustainability website. Please use the link below to view data.

 $\Rightarrow$  P.56 Medium-to-Long-term Environmental

# > Roadmap to carbon neutrality by 2050



# > Roadmap to a circular economy





# **Contributing to Reducing Environmental Impact**

# Relevant material issues | Manufacture and sell tires and industrial materials with advanced safety, quality and environmental performance | Manufacture and sell carbon neutral products | Develop biomass rubber and promote retread tires | Manufacture and sell industrial products that contribute to greenhouse gas reduction | Achieve carbon neutrality in our own activities by 2050 | Sustainable material usage rate of 100% by 2050 | Reach 1.3 million cumulative trees planted in YOKOHAMA Forever Forest Activities by 2030 | Sustainable natural rubber procurement | Coexistence and shared prosperity with agroforestry farming method promotion and rubber farmers | Roll out activities to preserve biodiversity at production sites

# **Basic Approach**

Currently, society faces various issues such as the depletion of natural resources, climate change, and the destruction of ecosystems, and all business activities have an impact on the environment. Yokohama Rubber has positioned itself as a top-level environment-friendly company in the Yokohama Rubber Environmental Policy, while striving to minimize its environmental footprint in all of its business processes. In addition, the actions that should be taken by employees are stipulated in the Yokohama Rubber Group Action Guidelines. Yokohama Rubber has established three pillars in tackling environmental issues: carbon neutrality, circular economy and coexistence with nature, and set medium-to-long-term targets for each of them, and laid out a roadmap for achieving them.

Environmental Policy, and Yokohama Rubber Group Action Guidelines https://www.y-yokohama.com/global/sustainability/environment/natural/

## Yokohama Rubber Basic Environmental Policy

Following the principle of "dealing fairly with society and valuing harmony with the environment", we shall assert our world-class strengths in technologies for protecting the environment.

- · Continued improvement of environmental management
- · Action to combat global warming
- Contributing to the creation of a sustainable recycling society

# Three Pillars of Environmental Issues

As part of ESG management under the Medium-Term Management Plan YX2023, we have established the slogan of "Caring for the Future" and pursue activities based on the following three pillars

ctivities based on the following three pillars.				
	Medium-to-long-term goals and the road map for achieving them			
Carbon Neutrality	<ul> <li>2030: 38% reduction (compared with 2013 levels) in CO<sub>2</sub> emissions from our own activities</li> <li>2050: Net zero CO<sub>2</sub> emissions from our own activities</li> </ul>			
Circular Economy	• 2030: At least 30% renewable/recycled raw material usage • 2050: 100% sustainable raw materials			
Coexistence with Nature	<ul> <li>YOKOHAMA Forever Forest Activities: Cumulatively, 1.3 million trees planted, and saplings provided by 2030</li> <li>Promotion of sustainable natural rubber procurement</li> <li>Biodiversity preservation activities compatible with local ecosystems</li> </ul>			

# **Initiatives to Achieve Carbon Neutrality**

In 2022, in addition to the solar power generation facility being installed at Shinshiro-Minami Plant as our model plant for achieving carbon neutrality, we have also switched to using only renewable energy at the Mishima Plant in the production line of motorsports tires in aiming to achieve both sustainable evolution and development of motorsports and carbon neutrality. Going forward, we will strive to achieve carbon neutrality at the Shinshiro-Minami Plant by 2030, and roll out the initiative to all other plants in Japan and

overseas by 2050. As a company-wide activity beyond production

sites, we will continue to implement 1% annual in-house improvement activities that promote improvements and revisions to facilities, equipment and transportation processes.



∕lishima Plant

# **Initiatives to Tackle the Circular Economy**

We will strive to make our raw materials sustainable, achieve at least 30% renewable/recycled raw material usage by 2030 through collaboration with partners and technological development in addition to our own exploration and development, and aim to achieve 100% sustainable raw materials by 2050. Specifically, we will aim to develop

technologies for the highly efficient synthesis of butadiene from ethanol and the production of butadiene and isoprene from biological resources, and develop technologies for tires that use sustainable materials in our motorsports endeavors, with the aim of balancing product performance with the circular economy.

#### ➤ Roadmap to a circular economy

Targets and steps to achievement	Step 1 Strengthen foundation	2025 Target 27%	Е	tep 2 xpand practical se for products	2030 Target 30%	2050 Sustainable raw materials target 100%
		Market launch and ex	xpar	nsion of resource recycling	J-oriented products	
Renewable/	Development of technologies ba	alanced with product performance	$\geq$	Expanded percentage of use	•	>
recycled raw materials	Searching for new raw materia	als	$\geq$	Practical implementation		Conversion to sustainable
Collaboration with partners,						
technological development	Initiatives with suppliers			Achieving results		raw materials
teemiological development						

#### Use of sustainable raw materials/recycled raw materials

# Development of Manufacturing Technology for Synthetic Rubber Core Chemicals with Carbon Resource Recycling

In January 2022, ZEON Corporation and Yokohama Rubber's "Development of Manufacturing Technology for Synthetic Rubber Core Chemicals with Carbon Resource Recycling" has been adopted by the New Energy and Industrial Technology Development Organization (NEDO) as a "Green Innovation Fund Project / Development of Technology for Producing Raw Materials for Plastics Using CO2 and Other Sources." The Green Innovation Fund Project is a program established by the Ministry of Economy, Trade and Industry (METI) to support businesses in conducting innovative research for reducing greenhouse gas emissions.

This demonstration project aims to establish two advanced technologies to produce butadiene and isoprene based on carbon resource recycling, from renewable carbon resources such as used tires and biomass at high yield rates, and to implement them in society in the 2030s. Butadiene and isoprene are typically made from petroleum as important chemical materials for synthetic rubber, which are the main raw materials for tires. The regeneration of these materials from renewable carbon resources will contribute to the improvement of resource recycling and carbon neutrality in the tire and rubber industries.

## (Outline of the project)

# (1) High efficiency butadiene synthesis from ethanol

- Outline: Development of technology for highly efficient conversion of ethanol derived from used tires and plant-based raw materials into butadiene
- Re-contractor/joint implementation partner: National Institute of Advanced



Butadiene produced from biomass

Industrial Science and Technology

# (2) Development of technology for manufacturing butadiene and isoprene from plant-based raw materials

- Outline: Development of bio technology that directly produces butadiene and isoprene from plant-based materials
- Re-contractor/joint implementation partner: Institute of Physical and Chemical Research and Tokyo Institute of Technology

# Supplying racing tires made with sustainable materials

Yokohama Rubber has been a sole tire supplier to the Japanese SUPER FORMULA Championship and begun supplying ADVAN racing tires that utilize sustainable materials in 2023. The supply of racing tires





ADVAN racing tires for dry conditions supplied to SUPER FORMULA in 2023

using sustainable materials is because of our endorsement of the sustainability project called SUPER FORMULA NEXT50 run by Japan Race Promotion Inc., which oversees SUPER FORMULA. The dry tires we supply use a variety of naturally-derived compounding agents such as natural rubber, agents produced from palm seeds or orange peels, as well as recycled wire made from recycled iron, recycled rubber recycled from used tires, and synthetic rubber using the mass balance method\*. As a result, approximately 33% of all raw materials are sustainable materials, yet the tires maintain the same performance as conventional tires. We will continue to develop tires in 2023 and beyond to further increase the ratio of sustainable raw materials.

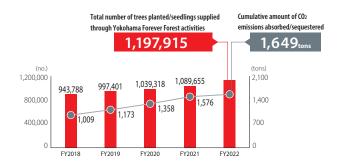
\* A method that allows products to be assigned the same biomass-derived characteristics according to weight as they are in the processing and distribution process from raw materials to products. Products assigned biomass-derived raw materials are regarded as biomass-derived products, regardless of the actual content of biomass-derived raw materials.

## **Contributing to Reducing Environmental Impact**

## Initiatives for Co-existence with Nature

#### **Yokohama Forever Forest Activities**

To implement sustainable business activities, corporate management must seek to consider natural capital and conserve biodiversity. YOKOHAMA Forever Forest is a company-wide afforestation activity launched in 2007 in preparation for Yokohama Rubber's 100th anniversary in 2017 with the aim of curbing global warming and preserving the ecosystem. We planted trees at 14 sites in Japan and 21 sites in 8 countries overseas, achieving our target of 500,000 trees in September 2017. We have continued these activities since 2017, when the target was achieved, and as a result of calculating the fixed amount of carbon dioxide in YOKOHAMA Forever Forest from a survey of seedling growth, it is estimated that the entire area of planted forests had absorbed 1,649 tons of  $\rm CO_2$  by the end of 2022. Going forward, we will continue our activities at each of our domestic and overseas bases, targeting a total of 1.3 million trees planted and seedlings supplied by 2030.

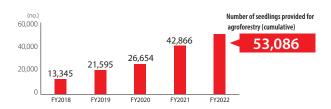


- Cumulative number of trees planted/seedlings supplied
- Cumulative amount of CO<sub>2</sub> emissions absorbed/sequestered

## Promoting procurement of sustainable natural rubber

# Initiatives for agroforestry

Yokohama Rubber promotes agroforestry at natural rubber farms. Agroforestry is a term coined from agriculture and forestry, which refers to grazing livestock and growing crops between planted trees. Cultivating and harvesting multiple types of crops in natural rubber forests helps to stabilize the incomes of natural rubber farmers which serves as a hedge against the risk of replanting rubber trees and fluctuations in the price of natural rubber. In addition, there are many other advantages, such as the reduction of diseases by improving biodiversity in the farm, which leads to the sustainable procurement of natural rubber.



<sup>\*</sup> Number of seedlings provided in fiscal 2022: 10, 220

Y.T. Rubber Co., Ltd. (YTRC), a natural rubber processing company of the Yokohama Rubber Group, encourages natural rubber farmers to adopt this farming method in the Surat Thani district of Thailand, where it is located. By the end of 2022, there were 57 farms with an area of about 170 hectares. YTRC continues to work toward the goal of expanding this to about 200 hectares by the end of 2030.

#### Initiatives in Surat Thani in southern Thailand

Since 2019, the Yokohama Rubber Group has been conducting surveys of natural rubber farms in the Surat Thani area, an important area for natural rubber production.



As a result of a survey conducted on a total of 437 farmers, comprising mainly YTRC's business partners, as of the end of December 2022, no illicit activities such as unjustified deforestation or human rights issues have been found to date. We will continue to conduct surveys and plan to survey a total of 500 farms by the end of fiscal 2023. We also hold seminars to improve productivity and other initiatives to raise awareness among local farmers. Yokohama Rubber plans to accumulate survey results, analyze the issues faced by natural rubber farms, contribute to the sustainable management of natural rubber farmers, and use this data to improve traceability.

# Participation in external initiatives toward a society of symbiosis with nature

In January 2023, Yokohama Rubber endorsed the philosophy of the Task Force on Nature-Related Financial Disclosures (TNFD) and participated in the TNFD Forum. Also in January 2023, we joined the 30by30 Alliance for Biodiversity. This alliance is a coalition of companies and other organizations working





Biodiversity monitoring (Ibaraki Plant)

to achieve "30by30," an international goal of conserving and protecting more than 30% of land and sea by 2030.

Yokohama Rubber has been promoting biodiversity conservation activities in the areas around its plants and factories in Japan and overseas. Going forward, we will continue to work on the conservation of biodiversity and the sustainable use of biological resources through our business activities, and promote various activities as a company for nature positivity\*.

\* An approach taken to enhance the resilience of our planet and societies to halt and reverse

#### Initiatives for water resources

The Yokohama Rubber Group is working to conserve resources by dividing the use of water into direct and indirect use. For direct use, we consider water risks according to the region of each production base, and emphasize the effective use of precious water resources. In addition, in the case of indirect use, we respond to risks related to water from raw material suppliers and take appropriate actions to prevent serious problems in operations. Furthermore, the Yokohama Rubber Group promotes initiatives based on the 3Rs (Reduce, Reuse, Recycle) of water at all business sites and regions, including in the supply chain, and strives to use water soundly and conserve water resources. In this way, we aim to contribute to an appropriate water cycle on a global scale.

#### > Yokohama Rubber's 3Rs of water initiatives

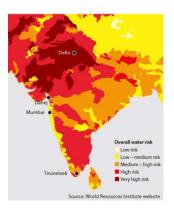
REDUCE	REUSE	RECYCLE
Reduce usage     Recharge aquifers	Use rainwater     Effectively reuse wastewater     Increase water quality of wastewater	Recycle water     Return water to withdrawal source

#### Assessing water risks and reducing water intake

In areas where production sites consume large quantities of water, we use existing water risk assessment tools such as the World Resources Institute's (WRI) Aqueduct and combine it with local information to determine overall water risks. In addition, we select the highest risk from among the representative water risks at each site and consider measures to address high-priority water risks. For the interim, we are targeting a 1% reduction in water use compared to the previous year.

In fiscal 2022, total water intake (consolidated) amounted to 8,247 thousand m³, a 2.9% decline from the previous year, of which 65% was in Japan and 35% overseas. We continuously prevent leaks, improve equipment for use of recycled water, and make effective use of water at all business sites. In particular, many overseas production bases have introduced closed water systems to respond to physical (water shortage) risks. Regarding wastewater, we regularly check that

its water quality does not pose any problems and meets the water quality standards of the countries and regions where we have operations.



# Reduction of waste volume and thorough management of PCB wastes

The Yokohama Rubber Group believes that minimizing the burden on the global environment will lead to sustainable business activities. Every year, we aim to reduce the basic unit of waste by at least 1%, recycle 100%, and achieve completely zero emissions at all production sites. We appropriately dispose of PCBs, asbestos, CFCs, mercury, etc. in accordance with laws and regulations. In fiscal 2022, the amount of waste (treatment volume) of the entire Group in Japan and overseas decreased by 5.8% from the previous year to 48,865 tons. Used equipment containing PCB is properly stored and disposed of in accordance with laws and regulations. In fiscal 2022, we processed 10.5 tons of this equipment. This includes the processing of ballasts that have been registered and stored since 2016. In the future, we will steadily proceed with the proper disposal of equipment containing PCBs that is still in use.



# ■ Total waste volume (consolidated) - ● - Basic unit of consolidated sales

# **Future Issues and Measures**

Today, biodiversity is recognized as a serious environmental risk, just like climate change. Throughout the TNFD's formulation process, we will promote initiatives and information disclosure that are consistent with our goals and methods. In addition, we will organize important issues in the overall business activities of the Yokohama Rubber

Group, promote activities to respond to them, and actively share information to deepen the understanding of employees and stakeholders. Also, we will build a system to ascertain data on global water use, formulate Group-wide guidelines on the proper use of water, and consider and invest in closed systems.

# **Dialogue Between Outside Directors**

Fiscal 2023 is the final year of the YOKOHAMA Transformation 2023 (YX2023) Medium-Term Management Plan. We asked two outside directors about the progress of YX2023 and their evaluations of current group governance, as well as their opinions from an objective standpoint on the role that directors should play in enhancing corporate value over the medium to long term.



# What are some of your impressions from discussions held by the Board of Directors last year?

**Okada** I have served as an outside director since 2013, and during that time, the Company has made a number of major decisions, including M&A, divestitures, and relocation of the head office. In order to gain a certain share of the global market, the Company is actively taking risks while making portfolio adjustments. Many of those discussions left strong impressions on me. The acquisition of TWS was a considerable decision due to the large sum involved, but as a result, we have greatly improved our international presence, and the market has praised the move with an increase in share price.

**Kaneko** I was also impressed by the TWS acquisition. In 2022, when I was appointed as an outside director, the pros and cons of the acquisition had already been decided, but there were detailed discussions on how to proceed with the acquisition and I felt that the fact that time was also spent on discussing capital investment was a trait of the Company's Board of Directors. What was particularly impressive was that the executive in charge of plants enthusiastically explained capital investments. He explained the necessity of investment and technical benefits in a detailed and understandable manner, and conveyed the thoughts and passion of the people on the manufacturing floor. His explanation made me aware

that this enthusiasm for manufacturing contributes greatly to the growth of the Company and left a strong impression on me.

# What are your thoughts on Yokohama Rubber's challenges in terms of management or business and how do you evaluate this?

**Kaneko** I am aware of the challenges in two respects. First of all, the Company makes management decisions very quickly, and I feel a strong sense of unity. On the other hand, from the perspective of diversity and inclusion, I think there are still not enough opportunities for female employees to play an active role at the managerial level. Society is becoming more complex and people's expectations are changing. With the integration of the head office and the Hiratsuka Factory, it will be important to take advantage of the evolution of remote technology and other factors to devise more diverse work styles. The second challenge is group governance. Yokohama Rubber is a global company with more than 60% of total sales revenue coming from overseas. In order for companies with different cultures and backgrounds to grow together, it is extremely important to find ways to have common values and corporate philosophies for the Group. This issue will become even more important as the Company continues to expand overseas and the Group grows.

**Kaneko** This issue has already been raised by the Board of Directors. In order to strengthen global governance, we are also considering the form of internal audit and whistleblowing systems. I believe that the Board of Directors will continue to sincerely face and review these issues, which will lead to further growth and development of the Company.

**Okada** When I was appointed to the Board, the number of outside directors was small and the fields in which they could make proposals to the Board more limited. Today, these fields have steadily expanded, and



the number of outside directors, female directors and outside Audit and Supervisory Board members has increased. And by changing the governance structure to a Company with an Audit and Supervisory Committee, I can see the intention to change governance to a system suitable for the new Yokohama Rubber

**Kaneko** Governance is constantly in need of review and evolution, and there is no final destination. In particular, there are cultural differences in systems that include overseas operations, so it is necessary to firmly nurture the culture and corporate philosophy of Yokohama Rubber and share them as a centripetal force. Even if each region or division conducts business in a different way, it is important to come up with ways to ensure that the core values and philosophies are firmly shared. While delegating authority to each region, continuous efforts will be required to foster a sense of unity as Yokohama Rubber Group.

# How do you evaluate the progress of the YX2023 Medium-Term Management Plan?

**Okada** The TWS acquisition is a major measure in YX2023. It is unique in that the Company is emphasizing post-merger integration (PMI). During the ATG acquisition in 2016, the Company dispatched an executive vice president at the time to ensure a detailed response. I remember being deeply impressed by the Company's intention of truly uniting acquired companies and growing together with them. Today, President Yamaishi is strongly aware of the importance of PMI for the TWS acquisition and I highly commend his willingness to invest in human resources and commit the necessary funds to this process.

**Kaneko** The reason why the Group's strategy is progressing smoothly is that it has valued the human resources of each company. In order to grow together with the acquired company, it is essential for the head office to understand the company and cooperate with local members. In

order to make good use of human capital, it is important to have appropriate personnel systems and workstyle reforms in place. It is also important to create an environment where mid-career hires and employees of different nationalities and genders can demonstrate their abilities, while increasing motivation and encouraging employees to play an active role. This will lead to the success of YX2023 and the enhancement of corporate value over the medium to long term.

# What role should outside directors play in Yokohama Rubber's efforts to achieve sustainable growth?

**Kaneko** I believe that the most important element of the Group's growth is human capital. An environment where employees are motivated and feel self-actualized is essential for the sustainable growth of the organization. To this end, it is important to respect diversity, provide opportunities for individuals to demonstrate their abilities, and build an environment where they can play an active role.

**Okada** Even in the uncertain and complex VUCA era, companies are expected to grow steadily. I am convinced that the driving force behind growth is that all employees work together to share the culture of Yokohama Rubber and contribute to society with a strong sense of mission.

**Kaneko** I recognize that my expected role as an outside director is to

supervise the execution of directors' duties with my expertise in accounting audits, internal control, and governance. At meetings of the Board of Directors, outside directors are expected to express their opinions from an objective perspective to provide a contrast to those of internal directors who are familiar



with the Company's business. This division of roles contributes to the Board of Directors' rational decision-making and clarification of issues. In recent years, "aggressive governance" has been advocated to take risks and lead to growth. I would like to support the Company while keeping an eye on the decision-making process to ensure risk management that supports sound risk-taking by management is being carried out appropriately.

**Okada** The roles of outside directors can be broadly divided into three. First, as an outsider, encourage constructive discussions and decision-making not bound by internal logic. Second, from a medium-to long-term perspective, propose the way of thinking necessary for the Company's sustainable growth. Third, check whether management is executing business appropriately, independent of the execution side. When I worked at the Ministry of Economy, Trade and Industry, I visited some 80 countries and worked internationally, and after retiring from the government, I served as an officer of an IT company and an oil exploration and development company. In order to support the Group's future growth, I would like to make use of these experiences to fulfill my duties as an outside director.

# **Corporate Governance**

## Relevant material issue

# Initiatives



**Corporate Governance** 

- Strengthening governance system
- Developing compliance promotion system

# **Basic Approach**

We in the Yokohama Rubber Group work in the spirit of our Corporate Philosophy to achieve continuing growth in corporate value and to thereby earn the unwavering confidence of all our stakeholders. Our efforts have included building a corporate governance framework for ensuring sound management that is fair and transparent, and we have worked continuously to reinforce that framework.

# **Basic Corporate Governance Policy**

- 1. Ensuring shareholders' rights and equality
- 2. Appropriate collaboration with stakeholders other than shareholders
- 3. Ensuring appropriate information disclosure and transparency
- 4. Responsibilities of the Board of Directors
- 5. Dialogue with shareholders

# **Corporate Governance System**

Basic Corporate Governance Policy https://www.y-yokohama.com/global/sustainability/governance/

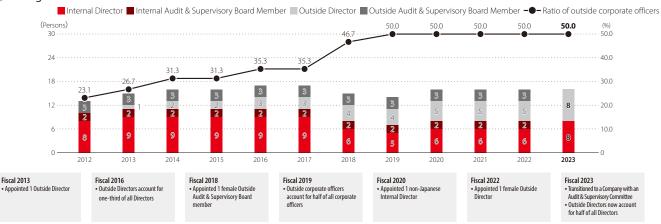
## Management and business execution system

The Company transitioned its governance system from a Company with an Audit & Supervisory Board to a Company with an Audit & Supervisory Committee by a resolution approved at the 147th Ordinary General Meeting of Shareholders held on March 30, 2023. The intention of this move was to further enhance corporate governance by first strengthening the supervisory function of the Board of Directors and second further strengthening the monitoring system by making Audit and Supervisory Committee members, who are responsible for auditing the execution of duties by directors, members with voting rights at the Board of Directors.

In addition to the institutional design under the Companies Act (General Meeting of Shareholders, Representative Directors, Board of Directors, Audit & Supervisory Committee, and Accounting Auditor), the Company's corporate governance system employs a corporate officer system to clarify management oversight and business execution while thoroughly speeding up management decision making and business execution. Under the current structure, the Board of Directors comprises 11 members in total (excluding directors who are Audit & Supervisory Committee members), six internal directors (including directors who serve concurrently as corporate officers) including the president, who holds the right to represent the Company, and five outside directors. In addition, there are 15 corporate officers, excluding those who serve concurrently as directors.

In addition, to strengthen the strategic functioning of top management, we have established an Executive Committee on which directors serve as key members. The committee monitors the achievement status of business plans and deliberates matters concerning business strategy.

## Changes in executives



<sup>\*</sup>The number of Internal Directors and Outside Directors for fiscal 2023 includes the number of Directors serving as Audit & Supervisory Committee members

# Management audit oversight

The Company has an Audit & Supervisory Committee that serves as an audit function for management, and consists of five members in total, two internal Audit & Supervisory Committee members, and three outside Audit & Supervisory Committee members. A system has been established for full-time Audit & Supervisory Committee member to learn of the state of business execution by attending important meetings and committees including the Executive Committee. The auditing structure comprises audits conducted by Audit & Supervisory Committee members to audit directors in the performance of their duties, financial auditing conducted by independent public accountants as outside audits and financial and business audits of each executive department and Group company conducted by the Internal Audit Dept.

These activities maintain independence from each other and serve to establish a three-pronged audit structure. At the same time, Audit & Supervisory Committee members receive information from the accounting auditor and the Internal Audit Dept. as appropriate in an effort to strengthen audit functions. Furthermore, we have assigned employees to the Audit & Supervisory Committee Secretariat to assist the Audit & Supervisory Committee in order to enhance the effectiveness of audits and facilitate audit operations.

#### **Personnel Remuneration Committee for Corporate Officers and Directors**

To ensure fairness and transparency in officer personnel affairs and remuneration, the Company has established the Personnel Remuneration Committee for Corporate Officers and Directors. The committee comprises three members, one representative director and two independent outside directors, ensuring that a majority of its members are independent outside directors. The committee met six times in fiscal 2022 to deliberate on the personnel moves and remuneration of officers; in turn, providing its recommendations to the Board of Directors.

The operation of the Personnel Remuneration Committee for Corporate Officers and Directors has changed as follows as a result the establishment of the Audit & Supervisory Committee on March 30, 2023.

(1) With regard to personnel matters, the committee deliberates on candidates for director to be submitted to the General Meeting of Shareholders, advises the Board of Directors on the results the consent of the Audit & Supervisory Committee for directors who are Audit & Supervisory Committee members and the opinions of the Audit & Supervisory Committee for directors who are not Audit & Supervisory Committee members. In turn, the Board of Directors makes the final determination. In addition, the appointment of corporate officers is deliberated by the committee, which then advises the Board of Directors, which makes the final decision.

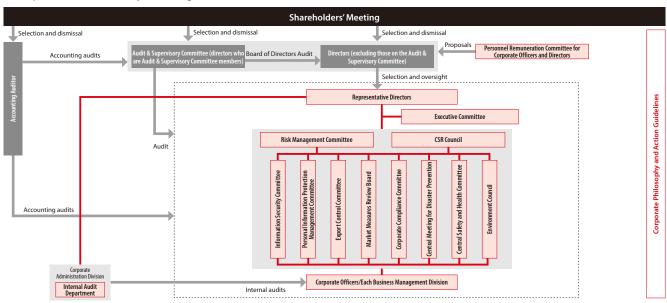
(2) With regard to remuneration, within the total amount approved at the General Meeting of Shareholders, the committee deliberates on the system of fixed remuneration, short-term performance-linked remuneration, medium-term performance-linked remuneration, and restricted stock remuneration as medium- to long-term performance-linked remuneration for representative directors and executive directors, and fixed remuneration for outside directors, and advises the Board of Directors. The remuneration system for directors who are Audit & Supervisory Committee members is determined by the Audit & Supervisory Committee in consideration of the opinions of the Personnel Remuneration Committee for Corporate Officers and Directors.

All members	3
Internal Director	Masataka Yamaishi (Chair)
Outside Director	Hideichi Okada and Hirokazu Kono

## **Executive Committee**

The Executive Committee, a meeting body that serves as an executive organ, meets three times per month, in principle, with the attendance of full-time Audit & Supervisory Committee member, to deliberate and determine management policy as well as important matters concerning management execution. Important matters discussed at the Executive Committee are reported to the Board of Directors together with a summary of such matters, and those of the highest priority (as stipulated by the Board of Directors Regulations) are also discussed by the Board of Directors.

#### > Corporate Governance System Diagram





# **Corporate Governance**

# Members of each institution (after transitioning to a Company with an Audit & Supervisory Committee)

Internal officers	Outside officers			
Institution	Board of Directors	Audit & Supervisory Committee	Personnel Remuneration Committee for Corporate Officers and Directors	Executive Committee
Composition	Chairperson Chairp	Chairperson  5 Audit & Supervisory Committee members (of which, 3 outside Audit & Supervisory Committee members)	Chairperson 3 directors (of which, 2 outside directors)	Chairperson  8 directors (of which, 5 corporate officers)
Number of meetings held in fiscal 2022*	17 times	7 times	6 times	48 times

<sup>\*</sup>Number of meetings of the Board of Directors, Audit & Supervisory Board, Personnel Remuneration Committee for Corporate Officers and Directors, and Executive Committee prior to the transition to a Company with an Audit & Supervisory Committee

# > Reason for selection of outside directors and attendance in meetings

	Name	Activities in fiscal 2022	Reason for selection
Outside Directors	Hideichi Okada	Board of Directors: attended all 17 meetings	Hideichi Okada actively provides opinions and suggestions from his international perspective and based on his deep insight of economic and social events surrounding corporate management. The Company appointed him as an outside director in the belief that he will contribute to the management of the Company with his ample experience in the government ministry and knowledge of corporate management accumulated in Japan Petroleum Exploration Co., Ltd. and other companies.
	Masatoshi Hori	Board of Directors: attended all 17 meetings	Masatoshi Hori has actively provided opinions and suggestions based on his ample experience and insight as a corporate manager as well as his track record of being involved and successful in a large number of M&A deals. The Company appointed him as an outside director in the belief that he will contribute to the management of the Company with his ample knowledge and insight.
	Hiroko Kaneko	Board of Directors: attended 11 of 13 meetings after appointment	Hiroko Kaneko has actively provided opinions and suggestions from the perspective of a certified public accountant with abundant experience of working at auditing firms and a university professor studying and teaching auditing and audit practices. The Company appointed her as an outside director in the belief that she will contribute to the management of the Company with her ample knowledge and insight.
	Megumi Shimizu	Board of Directors: attended all 17 meetings Audit & Supervisory Board: attended all 7 meetings	Megumi Shimizu has long worked as an attorney and currently serves as a partner at a leading law office of Japan. The Company appointed her as an outside director in the belief that she will use her ample insight and knowledge as a law expert for the management of the Company.
	Junichi Furukawa	New appointment	Junichi Furukawa is a corporate manager who possesses abundant experience and extensive knowledge of corporate management. The Company appointed him as an outside director in the belief that he will reflect his insights in finance and accounting and abundant knowledge with a sense of balance in the management of the Company.
Directors who are Audit & Supervisory Committee Members	Hirokazu Kono	Board of Directors: attended all 17 meetings	Hirokazu Kono has actively provided opinions and suggestions based on his deep insight accumulated through his long-year studies of management engineering and business administration at universities in Japan and the United States. The Company appointed him as a director who is an Audit & Supervisory Committee member in the belief that he will contribute to further reinforcing the auditing functions of the Company's management by utilizing his ample expertise and experience in management engineering and business administration.
	Atsushi Kamei	Board of Directors: attended 16 of 17 meetings Audit & Supervisory Board: attended all 7 meetings	Atsushi Kamei has actively provided frank opinions from the perspectives of his long years of experience and corporate management in leading retail business players. The Company appointed him as a director who is an Audit & Supervisory Committee member in the belief that he will continue to supervise the management of the Company from an external viewpoint.
	Hiroki Kimura	Board of Directors: attended 15 of 17 meetings Audit & Supervisory Board: attended all 7 meetings	Hiroki Kimura serves as President and Representative Director of Asahi Mutual Life Insurance Company, and he actively provides suggestions from his experience as a corporate manager of a financial institution. The Company appointed him as a director who is an Audit & Supervisory Committee member in the belief that he will contribute to further reinforcing the auditing functions of the Company's management with his professional knowledge accumulated in the fields of accounting, finance and asset management.

# **Operational Status of the Board of Directors**

In fiscal 2022, the Board of Directors met 17 times and deliberated on 64 agenda items. One of the main discussions of the Board of Directors in fiscal 2022 was the acquisition of Trelleborg Wheel Systems Holding AB (TWS) and Yokohama Rubber's transition to a Company with an Audit & Supervisory Committee. Regarding the acquisition of TWS, discussions centered on the significance of the acquisition and its alignment with the strategies of YX2023, the rationality of the acquisition price, and how to raise funds for the

acquisition. With regard to the transition to a Company with an Audit & Supervisory Committee, the Board of Directors identified the advantages of the transition and the issues with the Company's current governance, and discussed what kind of governance system should be appropriate for a global company. As a result, the Board of Directors considered that a Company with an Audit & Supervisory Committee would be the most suitable governance structure and made a resolution toward this end.

## **Evaluation of Board Effectiveness**

The Company conducted an anonymous survey from December 2019 to January 2020 targeting all directors (excluding the Chairman of the Board of Directors), including outside directors, and all Audit & Supervisory Board Members regarding the evaluation of the effectiveness of the Board of Directors. The results indicated that the Board of Directors of the Company is operating appropriately from a

comprehensive perspective and that the effectiveness of the Board of Directors is ensured. With the transition to a Company with an Audit & Supervisory Committee from fiscal 2023, the next evaluation of the effectiveness of the Board of Directors is scheduled to be conducted around autumn 2023.

# **Remuneration for Corporate Officers and Directors**

#### Overview of officer remuneration

Traditionally, Yokohama Rubber has paid directors (excluding outside directors) basic remuneration and annual bonuses as monetary remuneration under a system where the annual bonuses fluctuate according to Company-wide performance in each fiscal year and the attainment level of individual results for each director.

In addition, with the aim of ensuring the sustainable improvement of corporate value and greater sharing of value with shareholders, the Ordinary General Meeting of Shareholders held in 2018 resolved to introduce a restricted stock compensation system for directors (excluding outside directors). This system was extended to corporate officers from 2020.

Starting in 2021, a medium-term performance-linked remuneration system was introduced for directors (excluding outside directors) and corporate officers, with the aim of further incentivizing the achievement of quantitative targets in the Medium-Term Management Plan. Although the Company became a company with an Audit & Supervisory Committee on March 30, 2023, both internal and outside directors who are Audit & Supervisory Committee members are excluded from the directors eligible for this system.

# Eligibility for medium-term performance-linked remuneration

The officers eligible for medium-term performance-linked remuneration as of March 30, 2023, are as follows.

Position	Number of persons		
Representative Director	1		
Member of the Board and Managing Officer	4		
Member of the Board and Corporate Officer	1		
Corporate Officer	15		

# Method for calculating medium-term performance-linked remuneration

The applicable period is the three years from fiscal 2021 to fiscal 2023 that represent the quantitative target of the

Group's Medium-Term Management Plan. The standard is set at a cumulative consolidated business profit of ¥180 billion in total, with the remuneration calculated for all eligible persons according to the following formula.

Cumulative consolidated business profit over the applicable period ÷ 180 billion yen x 100	Calculation method		
120% or more	Monthly remuneration x 12 months x payment factor of 1.5		
100% or more but less than 120%	Monthly remuneration x 12 months x payment factor of 1		
Less than 100%	No payment		

Monthly remuneration used in the above formula is the remuneration set for each position in April 2021, and if a position changes part way through the applicable period, the calculation is to be made based on the monthly remuneration in the month the new position was assumed. For eligible persons, an individual monetary limit of ¥84.78 million is set.

Medium-term performance-linked remuneration is paid in cash within one month of the day following that day on which the cumulative consolidated business profit during the applicable period has been finalized at the first Ordinary General Meeting of Shareholders held after the end of the applicable period.



## **Corporate Governance**

## Amount of remuneration of Directors and Audit & Supervisory Board Members (fiscal 2022)

Category	Total remuneration (mil- lions of yen)			Number of eligible officers		
		Basic remuneration	Bonus	Restricted stock compensation	Medium-term perfor- mance-linked remuneration	(persons)
Member of the Board (excluding Member of the Board (Outside))	424	184	73	110	57	7
Audit & Supervisory Board Members (excluding outside members)	66	45	20	-	-	2
Member of the Board (Outside) and Audit & Supervisory Board Member (Outside)	80	80	-	-	-	9

A breakdown of the names, positional categories and remuneration amounts are listed below for those officers whose total remuneration including consolidated remuneration exceeded ¥100 million for fiscal 2022.

Country	Consolidated			Total by type of remuneration (millions of yen)			
Name	Consolidated total remunera- tion (millions of yen)	Officer category	Company category	Basic remuneration	Bonus	Restricted stock compensation	Medium-term perfor- mance-linked remuneration
Masataka Yamaishi	151	Member of the Board	Yokohama Rubber Co., Ltd.	56	25	50	18
		Member of the Board	Yokohama Rubber Co., Ltd.	22	-	15	3
Nitin Mantri	583	Member of the Board	Consolidated Subsidiary ATC Tires Pvt. Ltd.	87	248	-	-
		Member of the Board	Consolidated Subsidiary Yokohama Off-Highway Tires America Inc.	6	200	-	-

# **Board Diversity**

The Board of Directors of the Company consists of no more than 15 directors (excluding directors who are Audit & Supervisory Committee members) while the Audit & Supervisory Committee consists of no more than five members as stipulated in the Articles of

Incorporation. Our basic approach is to ensure their diversity, including outside directors, and an appropriate composition, while giving consideration to the balance of knowledge, experience, and abilities associated with each business.

# > Composition of the Board of Directors (after transition to a Company with an Audit & Supervisory Committee)



# Officer Training

The Company will appropriately provide necessary information to ensure the sustainable growth of the Company, the enhancement of corporate value over the medium to long term, and the full exercise of management supervision and auditing functions by directors. In addition, in order to enhance deliberations at Board of Directors meetings, outside directors are continuously provided with opportunities to understand the Company's business operations, such as prior distribution and explanation of Board of Directors materials and the provision of related information, as well as orientation at the time

of appointment, plant tours, and dialogue with management. In addition, even after assuming office, we encourage officers to continue to participate in external seminars, external organizations, and human networks for the purpose of acquiring new ideas and self-development through exposure to real information, and the Company bears the costs of such seminars. The Board of Directors confirms through surveys and other means whether or not the provision and mediation of training opportunities and support for such expenses are being appropriately implemented.

# **Tax Transparency and Tax Governance**

We established the Yokohama Group Tax Policy to ensure compliance with tax-related laws and regulations, considered a social norm, and to contribute to society through appropriate tax payments based on the Yokohama Group Organizational Governance Policy. In addition, we will fulfill our tax obligations as a global company by complying with the tax-related laws and regulations of each country and quidelines provided by the OECD.

The Yokohama Rubber Group's tax-related corporate governance is included within the Group's overall governance. This governance is implemented within the scope of responsibility of the General Manager of the Corporate Administration Division of the Yokohama Rubber Co., Ltd. The Yokohama Rubber Group's tax planning is implemented appropriately based on the actual status of the Group's business activities and in line with its business objectives. We strive to prevent tax planning for the purpose of tax avoidance using tax

havens and capital structures, understand the legislative intent of the preferential tax treatment available in each country, and utilize it within the scope of normal business activities to improve tax efficiency.

We will build sound, healthy relationships with the tax authorities of each country and respond seriously and with integrity to requests from the relevant authorities to participate in tax investigations. In the event of a difference of opinion between the Group and the tax authorities, the Group strives to engage in dialog with the authorities and to resolve the issue in accordance with the relevant tax-related laws and regulations

Corporate income taxes paid

Unit: billions of ven

	FY2020	FY2021	FY2022
Japan	5.59	5.29	9.05
Overseas	6.77	8.53	16.22
Total	12.36	13.82	25.27

Yokohama Rubber Group Tax Policy

https://www.y-yokohama.com/global/sustainability/governance/tax/

# **Status of Reducing Cross-Shareholdings**

## Policy on cross-shareholdings

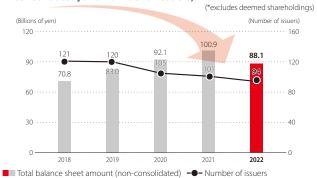
In the interests of corporate expansion and sustainable development, the Company believes it is essential to maintain cooperative ties with various companies. We adopt a medium-to-long-term perspective for enhancing the Company's corporate value and follow a policy of holding shares deemed strategically necessary after comprehensively accounting for strategic ties with the companies with whom we maintain important cooperative relationships, cooperative business-related ties with suppliers, and other factors.

#### Verifying the appropriateness of cross-shareholdings

Once a year, the Company verifies, in both qualitative and quantitative terms, the benefits and risks associated with its individual cross-shareholdings from a medium- to long-term perspective, also considering the nature and scale of transactions, among other

factors. These findings are reported to the Board of Directors. The Company sold all shares held in seven companies and some of the shares it holds in four companies in light of verification by the Board of Directors in February 2022.

# Trend in cross-shareholdings (amount on balance sheet [non-consolidated] and number of issuers)



# **Constructive Dialogue with Shareholders**

When engaging in dialogue (meetings) with shareholders, the director in charge of the Corporate Administration Division and the Corporate Planning Division serves as the director in charge, and the Corporate Administration Division and the Corporate Planning Division cooperates with the director in charge within a reasonable scope based on the wishes of shareholders and the main interests of the interview. If necessary, to a reasonable extent, we consider having outside directors or directors who are Audit & Supervisory Committee members attend meetings.

In principle, we conduct substantive shareholder surveys once a year and multiple times as necessary to understand the shareholder structure, after which the Corporate Planning Division, Accounting Division, and Legal Division strive to respond to shareholders by

exchanging opinions based on their respective professional perspectives.

In order to enhance the means of dialogue with shareholders other than individual meetings, financial results briefings are held quarterly, and explanations are given by the President and Representative Director at the end of the fiscal year and after the first half financial results, and the director in charge of the Corporate Planning Division provides other explanations. The results of dialogue (interviews) with shareholders are reported to the President and Representative Director as appropriate.

At the dialogue with investors as well as at financial results briefings, we pay attention to the management of insider information.



# **Compliance**

## Relevant material issue

## **Initiatives**



**Corporate Governance** 

- Strengthen the governance system
- Developing systems to promote compliance

## **Basic Approach**

In response to the expanding risks due to globalization, the Yokohama Rubber Group established the Group's Competition Law Compliance Policy and Anti-Corruption Policy, defined regulations and guidelines that embody these policies, and shared these requirements to members\*of the Yokohama Rubber Group. By combining the above with the Global Whistle-Blowing System, which are rolled out in our subsidiaries in each country and region, we aim to further raise the level of compliance in the Yokohama Rubber Group.

With regard to product liability, our mission is to contribute to the development of the company and society by winning the trust of our customers and securing appropriate levels of profit. In order to achieve this, we must continue to provide products of quality that satisfy customers around the world and that can be purchased with peace of mind. The Yokohama Rubber Action Guidelines state that, "We shall listen to the views of our customers, accurately ascertain their needs, and develop, design, manufacture, and sell products of genuine use to society."

\*All employees working in the Yokohama Rubber Group, including full-time employees, contract employees, temporary employees, and outsourced employees

# **Compliance System**

Yokohama Rubber has established a Corporate Compliance Committee chaired by the director in charge of the Corporate Administration Div. and a Corporate Compliance Department as the department that handles compliance implementation. The committee meets four times a year for ongoing implementation of various measures related to the Yokohama Rubber Group's compliance, and to report on its activities to the Board of Directors and the Audit & Supervisory Board. The Yokohama Rubber Group's Corporate Philosophy and Code of Conduct have been disseminated to all Group companies, including those overseas, and serve as guidelines via internal bulletin, etc. for the execution of duties by the directors and employees of each company. In addition, by assigning a person

from each division to be a concurrent member of the Corporate Compliance Dept., we strive to share updates on workplace training and awareness raising activities and relevant information. We have also appointed a Compliance Promotion Manager at each of the domestic and overseas group companies to carry out the same activities.

In the event of a quality problem or complaint in the market regarding a product that we have provided to customers, we respond promptly to resolve the problem and take measures to prevent its recurrence. These measures involve regularly conducting quality audits to confirm the implementation status of corrective actions and verifying their effectiveness.

# Whistle-Blowing System

Compliance Hotline is a system available that also handles anonymous whistleblowing in accordance with the Whistle-Blower Protection Act. There are two Compliance Hotlines, one internal and one external. The external Compliance Hotline is set up at a law firm to ensure independence. In addition, the General Counseling Room has been set up as a service for any member of the Group to consult over doubts regarding compliance. In fiscal 2022, the Compliance Hotline and General Counseling Room fielded 142 reports or consultations in total.

For overseas subsidiaries, a Global Whistle-Blowing System which is handled directly by the Corporate Compliance Dept. has been set up and is gradually becoming operational in overseas locations. Despite the delay due to COVID-19, phased introduction has been completed in China, the Philippines, Thailand, North America, Europe, and Vietnam as of 2022, except for a portion of business sites. Starting 2023, introduction is considered for production sites in Indonesia.

#### Whistle-Blowing System Global Whistle-Blowing System **Domestic Whistle-Blowing System** Overseas whistleblower Domestic whistleblower Corporate Compliance Committee Results report Whistleblowing Results report Whistleblowing Overseas whistleblower Domestic whistleblower contact (country-specific) contact Contact Whistleblowing Contact Whistleblowing Report Corporate Compliance Dept. Investigation and Investigation and Improvement instructions for results report results report improvement improvement Individual divisions and Overseas group companies domestic group companies

# **Education and awareness raising activities**

The Corporate Compliance Dept. plans and promotes compliance training for Group members. It distributes educational materials and conducts group learning and training activities at workplaces, depending on whether the content is intended for general employees or specific divisions or ranks as necessary,

In 2022, we continued training on harassment and quality misconduct, and focused on topics such as online defamation, mental health in the workplace, promotion of diversity and inclusion, and business and human rights.

#### ➤ Compliance Workplace Training Themes (2022)

The Yokohama Rubber Group uses its own educational materials to conduct group training on compliance at each workplace monthly. In fiscal 2022, the following themes were covered.

January Online defamation

**February** Mental health in the workplace

March Workplace bullying and coaching

April Promotion of diversity and inclusion

May Occupational injuries and concealing of occupational injuries

June Sexual harassment and gender harassment

July Business and human rights

August Revisions to the whistleblowing regulations

**September** Remarks made in the workplace that abuse one's position of power (maternity harassment and workplace bullying)

**October** Contribution to and consideration of local communities

November Improper conduct regarding quality

**December** Internal whistle-blowing system and reporting/consulting anonymously

# **Initiatives to Prevent Corruption**

The Yokohama Rubber Group Action Guideline states in 6. "We shall observe not only laws and regulations but also social norms." It also declares that "We shall not engage in any activity that is in violation of the competition-related law (antitrust legislation), any acts of bribery, and any other acts that deviate from laws, regulations, or business conventions." and "We shall maintain sound relations with political groups and public administrative authorities, and shall not engage in any acts of bribery, in Japan or any other country or region. We shall not entertain, give any gifts to, or give any money to business partners for the purpose of gaining illicit advantage." The Yokohama Rubber Group Action Guideline also states actions involving not only public servants, but also business partners as well.

Under our global whistleblowing system, we have established an external contact point to promptly identify illegal activities such as competition law violations and bribery, and we provide training in advance to overseas subsidiaries that are scheduled to introduce the system.

(People)

Training opportunities	Number of people
Pre-departure training for overseas posting	31
Newly appointed career path training	20
Pre-launch training for whistle-blowing system	1,433
Total	1,484

# **Initiatives at Group Companies**

Between July and November 2022, we invited an external law firm to conduct training on the theme of "Compliance with Competition Laws and Prohibition of Bribery and Fraud" as a preliminary training for the introduction of the global whistleblowing system at YTVI, a tire manufacturing company in Vietnam. A total of 555 people took part in this training. In addition, YTMT, a tire production company in Thailand, started operation of the system in February 2022, and YTRC, a natural rubber processing company, in May 2022.



Preliminary training at YTMT

# **Future Issues and Measures**

To respond to the growing risks associated with globalization, we will continue to expand the introduction of our global whistleblowing system and provide training. To prevent quality fraud, we will create an environment impervious to fraudulent activity by creating a training program that approaches motives based on case studies of other

companies, and by planning and implementing training for all employees in Japan and overseas, including affiliated companies. In addition, from the perspective of compliance with rules, we are confirming operations and inspecting processes, and if necessary, we will make improvements.



# **Risk Management**

# Relevant material issue

# **Initiatives**



**Corporate Governance** 

- Strengthening governance system
- Strengthening the Business Continuity Plan (BCP)

# **Basic Approach**

Yokohama Rubber is working to strengthen risk management as part of its internal control in order to minimize diversifying risks. We are focusing on identifying matters that have a significant impact on our business, taking preventive measures to stop risks before they occur, and creating a system for prompt and appropriate responses to minimize damage in the event of a serious risk incident.

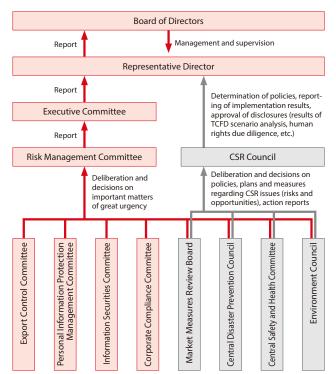
Currently, there is a need to respond to various changes in the business environment in Japan and overseas, such as growing awareness of human rights and global business expansion. In addition, the impacts of risks caused by the external environment, such as the COVID-19 pandemic, tight supply and demand of raw materials, and cyberattacks, are also enormous.

In light of these circumstances, we recognize that risk management is one of the most important issues in terms of management sustainability, and we are working to maintain and strengthen our risk management system.

# **Risk Management System**

In order to strengthen our defense system against various risks facing the company, we have established the Risk Management Committee, chaired by the executive in charge of risk management, to manage risks that may have a significant impact on management in a cross-functional manner and to appropriately evaluate and respond to them. The status of activities is regularly reported to the Board of Directors. In addition, for matters related to compliance, occupational health and safety, disasters, the environment,

# > Risk management system



information security, and export control that pose specific risks, the Corporate Compliance Committee, the Central Safety and Health Committee, the Central Disaster Prevention Council, the CSR Council, the Environment Council, the Information Securities Committee, the Personal Information Protection Management Committee, the Export Control Committee, etc. have been established, rules, guidelines, and manuals put into place and training provided.

The activities of the Risk Management, Corporate Compliance, Export Control, and Personal Information Protection Management committees are regularly reported to the Board of Directors. The status of activities of meeting bodies other than the above is reported to the Executive Committee as appropriate, and those deemed necessary are reported to the Board of Directors.

#### Fiscal 2022 results

In addition to the regular meetings of the Risk Management Committee and other committees twice a year, ad hoc committee meetings may be held based on the standards stipulated in the committee rules. In fiscal 2022, the Risk Management Committee and the Personal Information Protection Management Committee held extraordinary committee meetings, and the results of these meetings were as follows. Going forward, we will continue to work more on PDCA activities to identify possible risks, consider countermeasures, inform related parties, and verify them while sustaining our normal day-to-day business activities.

# Committee meetings (including extraordinary meetings)

3 .	 
Risk Management Committee	22 times
Personal Information Protection Management Committee	4 times
Export Control Committee	2 times
Information Securities Committee	2 times

# **Information Security Initiatives**

The Yokohama Rubber Group is implementing a variety of information security measures to protect customers' personal information and other confidential information from threats such as cyberattacks, which are becoming more sophisticated and complex every day, along with other information leakage risks.

As information security rules and regulations, we have established information security management rules and procedures, and regularly review them in response to changes in the environment surrounding information security.

As an initiative of the Yokohama Rubber Group as a whole, we have assigned information management managers to each

organization and Group company, established an information security communication network, and collect and provide information, including problems from stakeholders, through the Information Security Desk. In the unlikely event of an information security incident, we are working to strengthen our relationships so that we can respond promptly. We also regularly conduct targeted e-mail attack drills and e-learning for employees. In 2022, the information security management system acquired TISAX (Trusted Information Security Assessment Exchange) certification, which is an information security assessment formulated by the German Association of the Automotive Industry.

# **Activities in Fiscal 2022**

#### Fire and disaster prevention initiatives

Learning from the fire that occurred at YOKOHAMA TIRE PHILIPPINES, INC. (YTPI)'s production site in the Philippines in 2017, we are working to operate our business with safety as a top priority based on our vow to never cause a fire or accident again. In terms of fire prevention activities, in May 2022, we revised the company-wide Fire Prevention Guideline, which aim to prevent fires and prevent the spread of fires in the event of an emergency. In this way, we have established a system to prevent recurrence. We will continue this activity after fiscal 2022 and strengthen the Yokohama Rubber Group's fire prevention system by implementing the PDCA cycle for improvements that leads to fire prevention.

In terms of disaster prevention activities, we revised the Disaster Prevention Guidelines in September 2021 to clarify our preparedness for intensifying natural disasters and infectious diseases occurring over a wide area. With the aim of maintaining corporate activities based on human life first, these guidelines clarify the actions that employees should take in the event of a disaster, the company's disaster prevention system, and the enhancement and management of disaster stockpiles, and they promote the strengthening of Yokohama Rubber's disaster preparedness capabilities. Disaster prevention drills are also

held on a regular basis, and the content, frequency, and number of participants are confirmed to prepare for a quick response to disasters.



Fire prevention audit

#### **BCP** initiatives

We have introduced a safety confirmation system covering the Company and our domestic production subsidiaries and conduct ongoing drills. In addition to conducting safety confirmation drills regularly at each site, we have been conducting nationwide safety confirmation drills since March 2021. By increasing the frequency of safety confirmation drills, we are working to improve our initial response capabilities in the event of a disaster and raise our employees' awareness of disaster prevention. In addition, since 2017, the Disaster Prevention Guidelines have stipulated the stockpiles to be deployed at each site, including the quantity. Based on this, we manage and confirm in the database that stockpiles are secured for the required number of days, and replenish any shortages, including replacement of expired items.

With regard to the Business Continuity Plan (BCP), we have prepared guidelines for responding to various destructive and non-destructive disasters, such as infectious diseases, that include the Basic BCP Guidelines, and revise them as necessary. In 2022, we conducted a total of six BCP drills. Going forward, we will continue our efforts to protect our employees from disasters and

strengthen our systems and mechanisms to continue the supply of products and services when our business is exposed to disasters.



BCP training (Hiratsuka Factory)

# **Future Issues and Measures**

As the environment surrounding companies is becoming increasingly severe symbolized by the unstable global situation, the intensification and frequency of natural disasters due to climate change, and cyberattacks, which are becoming for advanced and stealthy, further strengthening of risk management will continue to be an issue.

Going forward, we will continue to improve risk countermeasures by implementing the PDCA cycle by each department in charge, and raise the awareness of each and every employee through BCP drills and information security training and drills.

# Senior Management As of August 1, 2023

# Members of the Board



Masataka Yamaishi President, Chairman of the Board



Nitin Mantri Member of the Board and Managing Officer, Head of OHT Div., CEO of Yokohama Off-Highway Tires K.K., Chairman of Yokohama India Pvt. Ltd., Chairman of Yokohama Tyre Vietnam Inc., in charge of Yokohama Europe



Shinji Seimiya Member of the Board and Managing Officer, Chief Technical & Productional Officer, in charge of IT & Management System Planning Div.



**Tomoaki Miyamoto** Member of the Board and Managing Officer, Head of Japan Replacement Tire Sales & Marketing Div., Head of Consumer Tire Product Planning Div., Head of Corporate Administration Div., Head of Hiratsuka



Yoshikuni Nakamura Member of the Board and Managing Officer, Head of Tire Business Planning Div., in charge of Tire Overseas Sales & Marketing Div., in charge of Corporate Social Responsibility Div., in charge of Tire Logistics Div.



Masahiro Yuki Member of the Board and Officer, Head of Corporate Planning Div., in charge of Quality Assurance Div., Chairman of Yokohama Rubber (China) Co., Ltd.



Hideichi Okada Member of the Board (Outside)

Tire Japan Co., Ltd.



Masatoshi Hori Member of the Board (Outside)



Hiroko Kaneko Member of the Board (Outside)



Megumi Shimizu Member of the Board (Outside)



Junichi Furukawa Member of the Board (Outside)



**Gota Matsuo** Member of the Board, Member of the Audit & Supervisory Committee



Hisao Uchida Member of the Board, Member of the Audit & Supervisory Committee



Hirokazu Kono Member of the Board, Member of the Audit & Supervisory Committee (Outside)



Atsushi Kamei Member of the Board, Member of the Audit & Supervisory Committee (Outside)



Hiroki Kimura Member of the Board, Member of the Audit & Supervisory Committee (Outside)

# ▶ Directors with the Skills Needed for Implementing Management Strategy

Name	Position	Corp mgt Mgt strategy	HR policies & development	Overseas knowledge Int'l business	Tech development & quality	Procurement/ Prod'n/Prod'n technology/ SCM	Finance & accounting	Governance Internal controls	ESG/ CSR	Sales & marketing
Masataka Yamaishi	President, Chairman of the Board	•	•	•				•		
Nitin Mantri	Member of the Board and Managing Officer	•		•		•				•
Shinji Seimiya	Member of the Board and Managing Officer				•	•			•	
Tomoaki Miyamoto	Member of the Board and Managing Officer	•								•
Yoshikuni Nakamura	Member of the Board and Managing Officer	•		•				•		•
Masahiro Yuki	Member of the Board and Officer	•		•						•
Hideichi Okada	Member of the Board (Outside)	•		•				•	•	
Masatoshi Hori	Member of the Board (Outside)	•	•							•
Hiroko Kaneko	Member of the Board (Outside)		•				•	•		
Megumi Shimizu	Member of the Board (Outside)			•				•		
Junichi Furukawa	Member of the Board (Outside)	•	•				•			
Gota Matsuo	Member of the Board, Member of the Audit & Supervisory Committee						•	•	•	
Hisao Uchida	Member of the Board, Member of the Audit & Supervisory Committee					•		•		
Hirokazu Kono	Member of the Board, Member of the Audit & Supervisory Committee (Outside)	•			•	•				
Atsushi Kamei	Member of the Board, Member of the Audit & Supervisory Committee (Outside)	•	•					•		•
Hiroki Kimura	Member of the Board, Member of the Audit & Supervisory Committee (Outside)	•					•	•		

Note) • entered for maximum of 4 skills or areas of specialization for each director, chart does not indicate all the skills or professional knowledge possessed by the directors.

# Officers

Name	Position
Shinichi Takimoto	Senior Managing Officer, Chairman and CEO of Yokohama Corporation of North America, Chairman of Yokohama Tire Corporation, Chairman of Yokohama Tire (Canada) Inc., Chairman of Yokohama Tire Mexico, S. de R.L. de C.V.
Jeff Barna	Senior Managing Officer, President of Yokohama Corporation of North America, President and CEO of Yokohama Tire Corporation
Tadaharu Yamamoto	Managing Officer, Assistant to President, Head of Tire Logistics Div.
Katsuhiko Yahata	Managing Officer, President of Yokohama Tire Japan Co., Ltd., Deputy Head of Japan Replacement Tire Sales & Marketing Div.
Takehisa Morimoto	Managing Officer, President of Yokohama Tire Manufacturing Mississippi, LLC., Chairman of Yokohama Tire Manufacturing Virginia, LLC.
Toru Nakamura	Officer, President of Yokohama Tire Manufacturing (Thailand) Co., Ltd.
Hiroyuki Shioiri	Officer, Chairman of Yokohama Europe GmbH, Chairman of Yokohama Scandinavia AB, Chairman of Yokohama H.P.T. Ltd., Chairman of Yokohama Iberia S.A., Chairman of Yokohama France S.A.S., President of Yokohama Suisse SA, President of Yokohama CEE Spółka z.o.o.

Name	Position
Satoshi Fujitsu	Officer, Head of O.E. Tire Sales & Marketing Div.
Kazuhito Yanadori	Officer, Head of Procurement Div., President of Yokohama Rubber Singapore Pte. Ltd.
Hiroyuki Narabayashi	Officer, Head of Quality Assurance Div.
Shingo Ishimitsu	Officer, Head of HR Dept., President of Yokohama Peer Support Co., Ltd., President of Yokohama Rubber Co-op., in charge of Personnel and Labor Affairs, Assistant to Head of Hiratsuka Factory
Anil Gupta	Officer, COO of ATC Tires Pvt. Ltd., Vice Chairman of Yokohama India Pvt. Ltd.
Tetsuya Nagao	Officer, Head of Tire Production Div.
Takeshi Masatomo	Officer, Head of Tire Overseas Sales & Marketing Div., Chairman of Yokohama Asia Co., Ltd.
Shoichiro Matsuda	Officer, Head of Tire Development Div., Head of Tire Designing Dept. No.2



# 11-year Key Financial and Non-Financial Data

Years ended December 31

		≫ Japan GAAP———				
	Unit	FY2012	FY2013	FY2014	FY2015	
Financial Data						
Profit and Loss						
Sales revenue	(Billions of yen)	559.7	601.6	625.2	629.9	
Business profit	(Billions of yen)	49.7	56.6	59.1	54.5	
Business profit margin	(%)	8.9	9.4	9.4	8.7	
Profit attributable to owners of parent	(Billions of yen)	32.6	35.0	40.5	36.3	
Financial Position						
Total assets	(Billions of yen)	543.8	653.6	734.5	710.7	
Interest-bearing debt	(Billions of yen)	146.3	175.3	184.3	190.9	
Equity attributable to owners of the parent	(Billions of yen)	204.2	270.8	323.6	339.0	
Management Indicators						
Ratio of equity attributable to owners of parent*1	(%)	37.5	41.4	44.1	47.7	
Return on assets*2	(%)	6.2	5.8	5.8	5.0	
Return on equity*3	(%)	17.8	14.7	13.6	11.0	
D/E ratio*4	(Times)	0.72	0.65	0.57	0.56	
		•	-			
Cash flows	(DIII)	59.2	46.7	59.0	57.5	
Cash flows from operating activities	(Billions of yen)	(30.5)	46.7	(53.7)	(55.1)	
Cash flows from investing activities Free cash flows	(Billions of yen)	28.6	2.1	(53.7)	(55.1)	
	(Billions of yen)	(30.7)	8.5	(0.1)	(6.4)	
Cash flows from financing activities	(Billions of yen)	(30.7)	0.5	(0.1)	(0.4)	
nvestment						
Capital expenditures*5	(Billions of yen)	28.1	33.5	55.3	50.9	
Depreciation & Amortization*5	(Billions of yen)	25.0	24.0	27.4	31.4	
R&D expenses	(Billions of yen)	12.8	12.6	13.4	14.2	
Return on Invested Capital	(96)	8.7	7.2	8.1	7.3	
Dividends per share						
Annual	(yen)	20	22	26	39* <sup>7</sup>	
Dividend payout ratio*6	(%)	20.44	20.31	10.37	17.25	
Earnings per share	(yen)	97.87	108.32	250.67	226.07	
Non-financial Data						
Business						
Patents		4,223	4,589	4,868	4,941	-
Tire production volume*8	(thousand tons)	602	596	668	681	
	(					
Environment	When the state of	617	610	605	697	
Emissions of greenhouse gases Scope 1-2 (consolidated)	(thousand tons)	617	23,301	685 30,844	23,831	
Emissions of greenhouse gases Scope 3*9 (consolidated)  Total energy consumption*10	(thousand tons)		•	1,231,611	1,313,523	
Total energy consumption 19 Fotal amount of waste (consolidated)	(MWh)	26,757	 18,165	30,967	32,901	
Recycling rate (consolidated)	(tons) (%)	20,737	93	97	32,901 96	
Total water withdrawal (consolidated)	(thousand m³)	8,380	8,525	8,660	8,682	
Biodiversity preservation activity implementation rate at	(tilousallu III.)	0,500	0,323	0,000	0,002	
production sites (%)	(%)	15	32	32	40	
Number of production sites implementing biodiversity pre				-		
ervation activities		4	10	10	12	
Cumulative number of trees planted and saplings provided	I	204.271	407.20	600.000	602.26 :	
under YOKOHAMA Forever Forest Activities		391,371	487,384	602,232	682,394	
Cumulative CO2 absorption and fixation volume (tons)	(tons)	228	329	447	576	
Employees						
Total number of employees (consolidated)		19,412	19,770	21,441	22,187	
Total number of employees (non-consolidated)		5,428	5,336	5,316	5,263	
Percentage of female employees (non-consolidated)	(%)	5.9	6.3	6.6	6.6	
Percentage of persons with disabilities (domestic)*11	(%)	2.1	2.1	2.1	2.0	
Number of employees taking childcare leave						
(non-consolidated)		12	10	15	30	
Rate of lost-worktime injuries (consolidated)*12		0.44	0.59	0.08	0.38	

<sup>\*1.</sup> Ratio of equity attributable to owners of parent = Total equity attributable to owners of parent / Total assets × 100

\*2. Return on assets = Profit attributable to owners of parent / Assets (average of previous and current fiscal period) × 100

\*3. Return on equity = Profit attributable to owners of parent / Total equity attributable to owners of parent (average of previous and current fiscal period) × 100

\*4. Debt-to-equity ratio = Interest bearing debt / Total equity attributable to owners of parent

\*5. From 2019 onwards, depreciation on right-of-use assets is excluded due to the application of IFRS 16 Leases.

\*6. Payout ratio = Dividend per share / Earnings per share

		» IFRS———					
	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
	596.2	646.3	650.2	650.5	551.1	670.8	860.5
	42.3	58.3	59.3	50.1	35.9	62.2	70.1
	7.1	9.0	9.1	7.7	6.5	9.3	8.1
<u>-</u>	18.8	40.0	35.6	42.0	26.3	65.5	45.9
	903.0	920.8	855.8	907.6	860.4	985.0	1,151.1
_	336.4	315.6	260.4	239.9	207.8	177.2	238.7
	348.8	379.8	374.0	418.9	415.5	525.3	614.4
	38.6	41.2	43.7	46.2	48.3	53.3	53.4
	2.3	4.4	4.0	4.8	3.0	7.1	4.3
	5.5	11.1	9.5	10.6	6.3	13.9	8.1
<b>.</b>	0.96	0.83	0.70	0.57	0.50	0.34	0.39
	75.4	60.5	82.8	75.4	78.3	68.3	39.2
	(166.5)	(29.7)	(43.1)	(43.6)	(27.9)	(4.5)	(46.4)
	(91.1)	30.7	39.7	31.7	50.4	63.8	(7.1)
	100.2	(28.1)	(64.9)	(35.5)	(46.6)	(55.2)	35.2
	35.9	39.9	46.9	51.3	28.4	38.8	54.9
•	33.2	34.6	36.8	36.0	37.5	38.3	41.9
•	14.5	15.1	15.2	15.0	14.1	15.3	16.0
	3.0	5.7	6.1	6.5	4.5	8.2	5.2
	52	62	62	64	64	65	66
•	44.38	24.87	27.91	24.46	39.00	15.91	23.05
	117.17	249.32	222.12	261.61	164.09	408.47	286.38
	5,109	5,480	5,675	5,956	6,291	6,009	6,242
	662	685	678	866	799	962	1,000
	714	716	720	1,052	986	1,000	1 051
	23,920	23,237	22,055	24,155	22,578	1,099 25,701	1,051 26,661
·····	1,341,111	1,353,082	1,333,451	1,787,203	1,678,571	1,879,142	1,837,184
	35,782	43,991	53,044	52,564	48,275	51,884	48,865
	91	97	95	96	95	95	98
	8,925	8,266	8,102	8,718	8,036	8,494	8,247
	41	43	47	49	49	50	50
	14	18	20	21	21	21	21
	756,039	853,047	943,788	997,401	1,039,318	1,089,655	1,197,915
	711	858	1,009	1,173	1,358	1,576	1,649
	24,610	25,439	26,274	27,428	27,252	27,222	28,468
•••••••••••••••••••••••••••••••••••••••	5,242	5,245	5,473	5,543	5,574	5,257	5,399
	6.7	6.8	7.1	7.3	7.4	7.5	7.2
	2.3	2.2	2.2	2.4	2.5	2.6	2.7
	31	30	35	37	40	35	42
	0.60	0.50	0.36	0.26	0.20	0.18	0.24

<sup>\*7.</sup> On July 1, 2015, the Company conducted a one-for-two reverse stock split.

\*8. Total volume based on tire product weight

\*9. Calculated and disclosed since FY2013

\*10. Calculated and disclosed since FY2014

\*11. Four companies, The Yokohama Rubber Co., Ltd., Yokohama Peer Support Co., Ltd., Yokohama Tire Japan Co., Ltd., Yokohama Industrial Products Japan Co., Ltd.

\*12. An indicator of the frequence of occupational accidents, expressed as the number of employees experiencing lost worktime due to occupational accidents per million total hours worked.



# CONSOLIDATED STATEMENT OF FINANCIAL POSITION The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries As of December 31, 2022 and 2021

	Millions of `	Yen	Thousands of U.S. Dollars	
_	2022	2021	2022	
ASSETS	(December 31, 2022)	(December 31, 2021)	(December 31 2022	
CURRENT ASSETS:				
Cash and cash equivalents (Note 8)	¥ 75,572	¥ 42,523	\$ 569,49	
Trade and other receivables (Notes 9 and 31)	193,749	169,869	1,460,05	
Other financial assets (Notes 11 and 31)	3,594	4,983	27,08	
Inventories (Note 10)	216,392	152,700	1,630,68	
Other current assets	14,673	13,485	110,57	
Total current assets (Note 18)	503,980	383,560	3,797,88	
NON-CURRENT ASSETS:				
Property, plant and equipment (Notes 12, 15 and 18)	372,933	336,269	2,810,34	
Goodwill (Notes 13 and 15)	104,244	90,130	785,56	
Intangible assets (Notes 13 and 15)	37,168	36,093	280,08	
Other financial assets (Notes 11 and 31)	112,804	120,316	850,06	
Deferred tax assets (Note 16)	8,140	7,655	61,33	
Other non-current assets (Note 20)	11,808	10,966	88,98	
Total non-current assets (Note 18)	647,097	601,428	4,876,38	
TOTAL ASSETS	¥ 1,151,076	¥ 984,988	\$ 8,674,27	
LIABILITIES AND EQUITY				
LIABILITIES				
CURRENT LIABILITIES:	V 70.404	V 74.045	A 500 77	
Trade and other payables (Notes 17 and 31)	¥ 78,131	¥ 71,945	\$ 588,77	
Bonds and borrowings (Notes 18 and 31)	117,480	81,607	885,30	
Other financial liabilities (Notes 19 and 31)	24,470	22,428	184,40	
Income taxes payable Other current liabilities	8,581	9,216	64,66	
Total current liabilities	65,846 294,508	57,307 242,502	496,20 2,219,35	
NON-CURRENT LIABILITIES:	404 004	05 620	042.40	
Bonds and borrowings (Notes 18 and 31)	121,221	95,628	913,49	
Other financial liabilities (Notes 19 and 31)	36,901	37,168	278,07	
Liabilities for retirement benefits (Note 20)	15,584 48,702	16,600 49,934	117,44	
Deferred tax liabilities (Note 16)			367,00	
Other non-current liabilities	11,038 233,447	10,198	83,18	
Total non-current liabilities TOTAL LIABILITIES	527,955	209,528 452,030	1,759,20 3,978,56	
			· ·	
EQUITY:	00.000	00.000		
Share capital (Note 21)	38,909	38,909	293,21	
Share premium (Note 21)	31,308	31,261	235,92	
Retained earnings (Note 21)	432,224	391,949	3,257,15	
Treasury shares (Note 21)	(11,650)	(11,758)	(87,79	
Other components of equity	123,633	74,952	931,67	
Total equity attributable to owners of the parent	614,424	525,312	4,630,17	
Non-controlling interests  TOTAL EQUITY	8,698 623 121	7,646 532,958	65,54 4,695,71	
TOTAL EQUIT	623,121	532,958	4,035,71	
TOTAL LIABILITIES AND EQUITY	¥ 1,151,076	¥ 984,988	\$ 8,674,27	

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries As of December 31, 2022 and 2021

	Millions	of Yen	Thousands of U.S. Dollars
	2022 (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
CONTINUING OPERATIONS			·
Revenue (Notes 6 and 7)	¥ 860,477	¥ 670,809	\$ 6,484,376
Cost of sales (Notes 12,13 and 20)	(572,803)	(447,178)	(4,316,523)
Gross profit	287,674	223,631	2,167,853
Selling, general, and administrative expenses			
(Notes 12,13,20 and 23)	(217,585)	(161,469)	(1,639,673)
Business profit (Note 6)	70,089	62,162	528,180
Other income (Note 24)	2,266	24,863	17,076
Other expenses (Notes 15 and 25)	(3,504)	(3,389)	(26,406)
Operating profit	68,851	83,636	518,849
Finance income (Note 26)	10,341	7,889	77,931
Finance costs (Note 26)	(7,571)	(6,327)	(57,051)
Profit before tax	71,622	85,199	539,729
Income taxes (Note 16)	(24,473)	(25,645)	(184,425)
Profit for the year from continuing operations	47,149	59,554	355,304
Profit for the year from discontinued operations (Note 37)	_	6.751	_
Profit for the year	47,149	66,305	355,304
PROFIT FOR THE YEAR ATTRIBUTABLE TO:  Owners of the parent  Non-controlling interests  Profit for the year	45,918 1,231 47,149	65,500 806 66,305	346,028 9,276 355,304
Profit for the year from continuing operations			
attributable to owners of the parent	45,918	58,749	346,028
Profit for the year from discontinued operations attributable to owners of the parent		6,751	
Profit for the year attributable to owners of the parent	¥ 45,918	¥ 65,500	\$ 346,028
EARNINGS PER SHARE (YEN/U.S. DOLLARS): Basic earnings per share Continuing operations (Note 28) Discontinued operations (Note 28)	286.38 —	366.37 42.10	2.16 —
Diluted earnings per share			
Continuing operations (Note 28)	285.80	365.82	2.15
Discontinued operations (Note 28)	-	42.04	-



# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries As of December 31, 2022 and 2021

	Millions	of Yen	Thousands of U.S. Dollars
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
PROFIT FOR THE YEAR	¥ 47,149	¥ 66,305	\$ 355,304
OTHER COMPREHENSIVE INCOME:			
Items that will not be reclassified subsequently to profit or loss			
Gains (losses) on financial assets measured at fair value through other comprehensive income (Notes 27 and 31)	(2,281)	8,639	(17,189)
Remeasurements of defined benefit plans	(2,201)	0,039	(17,103)
(Notes 20 and 27)	1,131	5,375	8,520
Items that may be reclassified subsequently to profit or loss			
Cash flow hedges (Note 27)	(1,253)	3,077	(9,440)
Exchange differences on translating foreign operations (Note 27)	56,358	38,108	424,700
Total other comprehensive income, net of tax	53,955	55,199	406,592
COMPREHENSIVE INCOME	¥101,104	¥121,505	\$ 761,896
COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	99,561	120,356	750,272
Non-controlling interests	1,542	1,149	11,624
Comprehensive income	¥101,104	¥121,505	\$ 761,896

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries As of December 31, 2022 and 2021

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

	Millions of Yen								
		Equit	y attributable to	owners of the pa	rent				
					Other compone	ents of equity			
	Share capital	Share premium	Retained earnings	Treasury shares	Exchange differences on translating foreign operations	Cash flow hedges			
BALANCE, JANUARY 1, 2022	¥ 38,909	¥ 31,261	¥ 391,949	¥ (11,758)	¥ 16,790	¥ 2,336			
Profit for the year			45,918						
Other comprehensive income (Note 27)					56,063	(1,253)			
Comprehensive income	_	_	45,918	_	56,063	(1,253)			
Purchase of treasury shares (Note 21)				(2)					
Disposal of treasury shares (Note 21)		0		0					
Share-based payment transactions (Notes 21 and 29)		27		110					
Dividends from surplus (Note 22)			(10,603)	)					
Transactions with non-controlling interests in subsidiaries that do not result in a loss of control		20							
Transfer to retained earnings			4,962						
Others			(1)	)					
Total transactions with owners	_	47	(5,643)	108	_	_			
BALANCE, DECEMBER 31, 2022	¥ 38,909	¥ 31,308	¥ 432,224	¥ (11,650)	¥ 72,854	¥ 1,083			

	Equi	ty attributable to	owners of the pa	rent		
		components of e			-	
	Gains (losses) on financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit plans	Total	Total equity attributable to owners of the parent	Non-controlling interests	Total equity
BALANCE, JANUARY 1, 2022	¥ 55,825	¥ —	¥ 74,952	¥ 525,312	¥ 7,646	¥ 532,958
Profit for the year			_	45,918	1,231	47,149
Other comprehensive income (Note 27)	(2,283)	1,115	53,643	53,643	312	53,955
Comprehensive income	(2,283)	1,115	53,643	99,561	1,542	101,104
Purchase of treasury shares (Note 21)			_	(2)		(2)
Disposal of treasury shares (Note 21)			_	0		0
Share-based payment transactions (Notes 21 and 29)			_	137		137
Dividends from surplus (Note 22)			_	(10,603)	(573)	(11,177)
Transactions with non-controlling interests in subsidiaries that do not result in a loss of control			_	20	(55)	(35)
Transfer to retained earnings	(3,847)	(1,115)	(4,962)		(00)	_
Others	(0,0)	(1,110)	( .,oo_) —	(1)	138	137
Total transactions with owners	(3,847)	(1,115)	(4,962)	(10,450)		(10,940)
BALANCE, DECEMBER 31, 2022	¥ 49,695	¥ —	¥ 123,633	¥ 614,424	¥ 8,698	¥ 623,121

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

	Millions of Yen						
		Equit	y attributable to	owners of the pa	rent		
					Other components of equity		
	Share capital	Share premium	Retained earnings	Treasury shares	Exchange differences on translating foreign operations	Cash flow hedges	
BALANCE, JANUARY 1, 2021	¥ 38,909	¥ 31,052	¥ 331,880	¥ (11,834)	¥ (20,967)	¥ (741)	
Profit for the year			65,500				
Other comprehensive income (Note 27)					37,758	3,077	
Comprehensive income	_	_	65,500	_	37,758	3,077	
Purchase of treasury shares (Note 21)				(2)			
Disposal of treasury shares (Note 21)							
Share-based payment transactions (Notes 21 and 29)		45		78			
Dividends from surplus (Note 22)			(10,278)				
Transactions with non-controlling interests in subsidiaries that do not result in a loss of control		(43)					
Transfer to retained earnings			5,444				
Others		207	(598)				
Total transactions with owners	_	208	(5,431)	76	_	_	
BALANCE, DECEMBER 31, 2021	¥ 38,909	¥ 31,261	¥ 391,949	¥ (11,758)	¥ 16,790	¥ 2,336	

	Equ	ity attributable to o	wners of the pa	rent		
	Othe	r components of ed	quity			
	Gains (losses) on financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit plans	Total	Total equity attributable to owners of the parent	Non-controlling interests	Total equity
BALANCE, JANUARY 1, 2021	¥ 47,248	¥ —	¥ 25,540	¥ 415,547	¥ 7,314	¥ 422,862
Profit for the year			_	65,500	806	66,305
Other comprehensive income (Note 27)	8,637	5,384	54,856	54,856	343	55,199
Comprehensive income	8,637	5,384	54,856	120,356	1,149	121,505
Purchase of treasury shares (Note 21)			_	(2)		(2)
Disposal of treasury shares (Note 21)			_	_		_
Share-based payment transactions (Notes 21 and 29)			_	123		123
Dividends from surplus (Note 22)			_	(10,278)	(666)	(10,943)
Transactions with non-controlling interests in subsidiaries that do not				(42)	(4.40)	(400)
result in a loss of control				(43)	(142)	(186)
Transfer to retained earnings	(61)	) (5,384)	(5,444)	_		_
Others				(391)	(9)	(400)
Total transactions with owners	(61)	(5,384)	(5,444)	(10,591)	(817)	(11,409)
BALANCE, DECEMBER 31, 2021	¥ 55,825	¥ —	¥ 74,952	¥ 525,312	¥ 7,646	¥ 532,958

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

			Thousands of	of U.S. Dollars		
		Equit	y attributable to	owners of the pa	rent	
				Other components of equity		
	Share capital	Share premium	Retained earnings	Treasury shares	Exchange differences on translating foreign operations	Cash flow hedges
BALANCE, JANUARY 1, 2022	\$ 293,211	\$ 235,575	\$ 2,953,646	\$ (88,608)	\$ 126,529	\$ 17,605
Profit for the year			346,028			
Other comprehensive income (Note 27)					422,481	(9,440)
Comprehensive income	_	_	346,028	_	422,481	(9,440)
Purchase of treasury shares (Note 21)				(17)		
Disposal of treasury shares (Note 21)		0		2		
Share-based payment transactions (Notes 21 and 29)		203		830		
Dividends from surplus (Note 22)			(79,905)	)		
Transactions with non-controlling interests in subsidiaries that do not result in a loss of control		149				
Transfer to retained earnings			37,394			
Others			(11)	)		
Total transactions with owners	_	353	(42,521)	815	_	_
BALANCE, DECEMBER 31, 2022	\$ 293,211	\$ 235,928	\$ 3,257,154	\$ (87,793)	\$ 549,010	\$ 8,165

	Eau	itv attri	butable to c	owners of the pa	arent		
			onents of e			•	
	Gains (losses) on financial assets measured at fair value through other comprehensive income	of defi		Total	Total equity attributable to owners of the parent	Non-controlling interests	Total equity
BALANCE, JANUARY 1, 2022	\$ 420,687	\$	_	\$ 564,820	\$ 3,958,646	\$ 57,615	\$ 4,016,262
Profit for the year				_	346,028	9,276	355,304
Other comprehensive income (Note 27)	(17,202)	)	8,404	404,244	404,244	2,348	406,592
Comprehensive income	(17,202)	)	8,404	404,244	750,272	11,624	761,896
Purchase of treasury shares (Note 21)				_	(17)		(17)
Disposal of treasury shares (Note 21)				_	2		2
Share-based payment transactions (Notes 21 and 29)				_	1,033		1,033
Dividends from surplus (Note 22)				_	(79,905)	(4,320)	(84,225)
Transactions with non-controlling interests in subsidiaries that do not result in a loss of control				_	149	(415)	(266)
Transfer to retained earnings	(28,990)	1	(8,404)	(37,394)		(410)	(200)
Others	(20,000)	'	(5, 10 1)	(31, <b>00</b> 1)	(11)	1,040	1,029
Total transactions with owners	(28,990)		(8,404)	(37,394)	(78,748)	(3,696)	(82,444)
BALANCE, DECEMBER 31, 2022	\$ 374,495	\$	_	\$ 931,670	\$ 4,630,170	\$ 65,544	\$ 4,695,713



# CONSOLIDATED STATEMENT OF CASH FLOWS The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries As of December 31, 2022 and 2021

	Millions	Thousands of U.S. Dollars	
_	2022	2021	2022
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)	(From January 1, 2022 to December 31, 2022)
CASH FLOWS FROM OPERATING ACTIVITIES:	December 61, 2022)	December 51, 2021)	December 01, 2022)
Profit before tax	¥ 71,622	¥ 85,199	\$ 539,729
Profit before tax from discontinued operations (Note 37)	- 11,022	9,191	<b>4</b> 000,120
Depreciation and amortization	49,914	45,560	376,142
Impairment losses	285	93	2,150
Increase (decrease) in liabilities			_,
for retirement benefits	(267)	410	(2,011)
Interest and dividend income	(5,021)	(3,160)	(37,834)
Interest expenses	2,939	2,100	22,150
Loss (gain) on sale and retirement of			
non-current assets	78	(20,063)	584
Decrease (increase) in trade receivables	(11,733)	(7,387)	(88,419)
Increase (decrease) in trade payables	5,983	6,193	45,086
Decrease (increase) in inventories	(47,682)	(33,107)	(359,322)
Gain on sale of discontinued operations (Note 37)	(574)	(9,292)	(4.204)
Other Subtotal	(571) 65,547	4,494	(4,304)
Interests and dividends received	5,017	80,232 3,180	493,952 37,809
Interests paid	(2,890)	(2,158)	(21,778)
Income taxes (paid) refund	(28,444)	(12,951)	(214,348)
Net cash provided by operating activities	39,231	68,303	295,635
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from withdrawal of time deposits	2,283	1,096	17,203
Payments into time deposits	· —	(2,077)	· —
Purchases of property, plant and equipment	(54,378)	(35,930)	(409,783)
Proceeds from sale of property,			
plant and equipment	2,072	21,766	15,616
Purchases of intangible assets	(514)	(370)	(3,870)
Purchases of investment securities	(326)	(113)	(2,458)
Proceeds from sale of investment securities	7,340	35	55,312
Proceeds from sale of discontinued operations (Note 37)	_	11,846	
Other	(2,834)	(732)	(21,360)
Net cash used in investing activities  CASH FLOWS FROM FINANCING ACTIVITIES:	(46,357)	(4,479)	(349,339)
Net increase (decrease) in short-term borrowings (Note 30)	34,460	(2,163)	259,680
Net increase (decrease) in	0 1, 100	(2,100)	200,000
commercial paper (Note 30)	7,000	_	52,751
Proceeds from long-term borrowings (Note 30)	13,524	6,884	101,913
Repayments of long-term borrowings (Note 30)	(19,494)	(31,814)	(146,906)
Proceeds from issuance of bonds (Note 30)	30,000		226,074
Redemption of bonds (Note 30)	(12,000)	(10,000)	(90,430)
Purchases of treasury shares	108	76	815
Proceeds from sale of treasury shares	27	45	203
Cash dividends paid (Note 22)	(10,603)	(10,277)	(79,903)
Other (Note 30)	(7,849)	(7,945)	(59,145)
Net cash provided by (used in) financing activities	35,172	(55,195)	265,052
Effect of exchange rate changes on			
cash and cash equivalents	5,003	3,134	37,703
Net increase (decrease) in cash and cash equivalents	33,049	11,764	249,052
Cash and cash equivalents	33,043	11,704	243,032
at the beginning of year (Note 8)	42,523	30,760	320,446
Cash and cash equivalents at the end of year	-		
(Note 8)	¥ 75,572	¥ 42,523	\$ 569,498

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Yokohama Rubber Co., Ltd., and Consolidated Subsidiaries

#### 1. REPORTING ENTITY

The Yokohama Rubber Co., Ltd. (the "Company") is a corporation located in Japan. The consolidated financial statements of the Company consist of the Company and its consolidated subsidiaries (collectively, the "Group"), and the consolidated financial statements for the fiscal year ended December 31, 2022 were approved by the Board of Directors on March 30, 2023. The details of the Group's main businesses are described in 6. "SEGMENT INFORMATION."

#### 2. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Statement of Compliance with IFRS

The Group prepares its consolidated financial statements in accordance with IFRS issued by the International Accounting Standards Board. As the Company meets all the requirements for a "specified company under designated international accounting standards" prescribed in Article 1-2 of the Ordinance on Consolidated Financial Statements, the Company applies Article 93 of the Ordinance.

# 2. Basis of Measurement

The consolidated financial statements are prepared on a historical cost basis, except for financial instruments and other items presented in 3. "SIGNIFICANT ACCOUNTING POLICIES."

#### 3. Presentation Currency and Unit

The consolidated financial statements are presented in Japanese yen, which is the Company's functional currency, and fractions less than one million yen are rounded to the nearest million.

The US dollar amounts included herein are solely for the convenience of the reader and have been translated from the Japanese yen amounts at the rate of ¥132.7 = \$1.00, the approximate exchange rate prevailing on December 31, 2022.

#### 3. SIGNIFICANT ACCOUNTING POLICIES

# 1. Basis of Consolidation

Subsidiaries are entities over which the Group has control. The Group determines that it has control over an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

All subsidiaries of the Group are consolidated from the acquisition date (that is, the date on which the Group obtains control) until the date on which the Group loses the control.

When the accounting policies of a subsidiary are different from those of the Group, adjustments are reflected, as needed, to the financial statements of the subsidiary.

Any changes in interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions, and the gains or losses are not recognized. On the other hand, if there are any changes in interest in a subsidiary that result in a loss of control, the Group derecognizes the subsidiary's assets and liabilities as well as non-controlling interests and the cumulative amount of other comprehensive income related to the subsidiary.

Comprehensive income of a subsidiary is attributed to the Company's interest and non-controlling interests in the subsidiary even if this results in the non-controlling interests having a deficit balance. Intra-group balances of receivables and payables, intra-group transactions, and unrealized gains and losses arising from intra-group transactions are eliminated in preparing the consolidated financial statements.

#### 2. Business Combinations

Business combinations are accounted for by the acquisition method. The Group elects to measure non-controlling interests in the acquiree for each business combination at either fair value or at the proportionate share of the acquiree's identifiable net assets. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair value at the acquisition date. Acquisition costs incurred are expensed when incurred.

Goodwill is measured as the excess of the aggregate of the consideration transferred in a business combination, the amount of non-controlling interest in the acquiree and the fair value of equity interest in the acquiree previously held by the acquirer, over the net amount of identifiable assets and liabilities at the acquisition date.

# **Financial Section**

# 3. Foreign Currency Translation

# (1) Foreign Currency Transactions

Foreign currency transactions are translated into each functional currency of the Company and its subsidiaries at the spot exchange rate on the transaction date.

Foreign currency monetary assets and liabilities at the end of the fiscal year are retranslated into the functional currency using the exchange rate at the end of the fiscal year, and exchange differences arising from the translation and settlement are recognized in profit or loss; provided that exchange differences arising from financial assets measured at fair value through other comprehensive income are recognized in other comprehensive income, and the cumulative amount of the exchange differences is recognized in other components of equity.

#### (2) Translation of Foreign Operations

Assets and liabilities of foreign operations are translated into Japanese yen using the exchange rate at the end of the fiscal year, while revenue and expenses of the foreign operations are translated into Japanese yen using the average exchange rate for the fiscal year, unless there have been significant changes in exchange rates during the period. Exchange differences arising from the translation of financial statements of the foreign operations are recognized in other comprehensive income, and the cumulative amount of the exchange differences is recognized in other components of equity.

#### 4. Financial Instruments

#### (1) Non-derivative Financial Assets

#### (i) Initial recognition and measurement

Trade and other receivables are initially recognized on the date when they occur. All other financial assets are initially recognized on the trade date when the Group becomes a party to the contract of the financial assets. All financial assets, other than those measured at fair value through profit or loss, are initially measured at fair value plus transaction costs. Financial assets are classified into financial assets measured at amortized cost, at fair value through profit or loss, and at fair value through other comprehensive income. The classification is determined at initial recognition of the financial asset. Financial assets that meet both of the following conditions are classified as financial assets measured at amortized cost.

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets other than those measured at amortized cost are classified as financial assets measured at fair value.

When the Group elects to recognize equity financial assets measured at fair value through other comprehensive income, the Group shall make the designation thereof and apply such method of recognition consistently in subsequent periods.

Debt financial assets measured at fair value that meet both of the following conditions are classified as financial assets measured at fair value through other comprehensive income and all other debt financial assets are classified as financial assets measured at fair value through profit or loss.

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

# (ii) Subsequent measurement

Financial assets measured at amortized cost are measured at amortized cost using the effective interest method.

For equity financial assets measured at fair value that are designated as measured at fair value through other comprehensive income, any changes in fair value are recognized in other comprehensive income. When these financial assets are derecognized or the decline in their fair value is significant, cumulative gains or losses previously recognized in other comprehensive income are transferred directly to retained earnings.

For debt financial assets measured at fair value that are classified as measured at fair value through other comprehensive income, any changes in fair value, excluding impairment gains or losses and foreign currency exchange gains or losses, are recognized in other comprehensive income until the financial assets are derecognized. When these financial assets are derecognized, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

Dividends on equity financial assets measured at fair value through other comprehensive income are recognized as finance income.

# (iii) Impairment of financial assets

For impairment of financial assets measured at amortized cost, an allowance for doubtful receivables is recognized for expected credit losses on the financial assets.

Expected credit losses are measured as the present value (discounted using the effective interest rate determined at initial recognition) of the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive. At the end of each fiscal year, the Group assesses whether the credit risk on financial instruments has increased significantly since initial recognition. If the credit risk has not increased significantly since initial recognition, the Group measures the allowance for doubtful receivables at an amount equal to 12-month expected credit losses. Meanwhile, if the credit risk has increased significantly since initial recognition, the Group measures the allowance for doubtful receivables at an amount equal to lifetime expected credit losses. However, for receivables, such as trade receivables, the Group always measures the allowance for doubtful receivables at an amount equal to lifetime expected credit losses.

The provision of allowance for doubtful receivables on financial assets is recognized in profit or loss. When an event that results in a reduction of the allowance for doubtful receivables occurs, the amount of reversal of the allowance for doubtful receivables is recognized in profit or loss.

The Group measures expected credit losses of a financial instrument in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available without undue cost or effort at the end of the fiscal year about past events, current conditions, and forecasts of future economic conditions.

#### (iv) Derecognition

The Group derecognizes financial assets when the contractual rights to receive cash flows of the financial assets expire, or when it transfers substantially all the risks and rewards of ownership of the financial asset as a result of transferring the contractual right to receive cash flows of that financial asset.

#### (2) Non-derivative Financial Liabilities

#### (i) Initial recognition and measurement

The Group initially recognizes debt securities issued by the Group at the date of issuance. Financial liabilities other than debt securities are initially recognized on the transaction date when the Group becomes a party to the contract of the financial liabilities. All financial liabilities are classified as financial liabilities measured at amortized cost and are initially measured at fair value less transaction costs.

# (ii) Subsequent measurement

Financial liabilities are subsequently measured at amortized cost using the effective interest method.

# (iii) Derecognition

The Group derecognizes financial liabilities when they are extinguished, i.e., when the obligation specified in the contract is discharged or canceled or expires.

# (3) Offsetting Financial Assets and Financial Liabilities

Financial assets and financial liabilities are offset and presented as a net amount in the consolidated statement of financial position when, and only when, the Group currently has a legal right to set off their balances and intends either to settle on a net basis or to recover the asset and settle the liability simultaneously.

#### (4) Derivatives and Hedge Accounting

The Group uses derivatives, such as forward foreign exchange contracts, to hedge foreign currency risk and interest rate risk. Such derivatives are initially measured at fair value on the date when the contract is entered into and are subsequently measured at fair value. Changes in the fair value of derivatives are accounted for depending on the hedging purpose and hedge designation when the derivatives are designated as qualifying hedging instruments, and are recognized in profit or loss when the derivatives are not designated as qualifying hedging instruments.

# (i) Qualifying criteria for hedge accounting

At the inception of the hedge, the Group documents the relationship between the hedging instrument and the hedged item as well as the Group's risk management objective and strategy for undertaking the hedge transaction. In addition, at the inception of the hedge and throughout the term of the hedge, the Group assesses continuously whether all of the following criteria are met:

- there is an economic relationship between the hedged item and the hedging instrument;
- · the effect of credit risk does not dominate the value changes that result from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that resulting from the quantities of the hedged item and the hedging instrument that the Group actually uses.

# (ii) Accounting for derivative transactions qualifying for hedge accounting

• Fair value hedge

Any changes in the fair value of derivatives designated as hedging instruments are recognized in profit or loss. Any changes in the fair value of the hedged items are recognized in profit or loss, and the carrying amount of the hedged items is adjusted accordingly.

# **Financial Section**

# · Cash flow hedge

Of changes in the fair value of hedging instruments, the effective portion of the hedge is recognized in other comprehensive income, and the ineffective portion of the hedge is recognized in profit or loss.

The balances of cash flow hedges are deducted from other comprehensive income in the consolidated statement of comprehensive income for the same period when the hedged cash flows affect profit or loss, and reclassified to profit or loss in the same line items as the hedged items.

The Group discontinues the application of hedge accounting when the hedge ceases to meet the effectiveness criteria for hedge accounting, when the hedge designation is revoked, or when the hedging instrument expires or is sold, terminated, or exercised.

#### (iii) Accounting for derivative transactions not qualifying for hedge accounting

For derivatives held for hedging purposes that do not meet hedge accounting requirements, any changes in their fair value are immediately recognized in profit or loss.

# (5) Fair Value of Financial Instruments

The fair value of financial instruments that are traded on an active financial market at the end of the fiscal year is based on quoted market prices or dealer prices.

The fair value of financial instruments for which there is no active market is determined based on prices derived by appropriate valuation techniques or presented by counterparty financial institutions.

# 5. Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments that are readily convertible to cash and subject to an insignificant risk of changes in value with original maturities of three months or less.

#### 6. Inventories

Inventories are measured at the lower of cost and net realizable value. The cost is determined primarily using the weighted average method.

#### 7. Property, Plant and Equipment

Property, plant and equipment are presented at cost less accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment includes costs directly attributable to the acquisition of the asset, the costs of dismantling and removing the asset and restoring the site to the original condition, and borrowing costs directly attributable to the acquisition, construction, or production of a qualifying asset.

Expenditure incurred after the acquisition of an item of property, plant and equipment is recognized as an asset if, and only if:

- it is probable that future economic benefits associated with the expenditure will flow to the Group; and
- · the expenditure can be measured reliably.

Property, plant and equipment are initially recognized at cost, which is measured using the cost model.

Property, plant, and equipment are depreciated using the straight-line method over the estimated useful life of each asset.

The estimated useful lives of major property, plant and equipment are as follows:

Buildings and structures 5 to 50 years Machinery, equipment, and vehicles 2 to 10 years Tools, furniture, and fixtures 2 to 10 years

The depreciation method, residual value, and estimated useful life of an asset are reviewed at the end of each fiscal year. Any changes are applied prospectively as changes in accounting estimates.

The gain or loss realized on the disposal of an asset is calculated as the difference between the price for disposal and the carrying amount of the asset, and included in profit or loss.

# 8. Goodwill and Intangible Assets

# (1) Goodwill

Goodwill is presented at cost less accumulated impairment losses. Goodwill is not amortized and is tested for impairment. For impairment, please refer to "(10) Impairment of Non-financial Assets."

# (2) Other Intangible Assets

Intangible assets acquired separately are measured at cost at initial recognition. Intangible assets acquired in a business combination are measured at fair value at the acquisition date. Intangible assets are subsequently measured using the cost model and presented at cost less accumulated amortization and accumulated impairment losses. Intangible assets with definite useful lives are amortized using the straight-line method over their estimated useful lives.

The estimated useful lives of major intangible assets are as follows:

Customer-related assets: 13 years Software: primarily 5 years

The amortization method, residual value, and estimated useful life of an asset are reviewed at the end of each fiscal year. Any changes are applied prospectively as changes in accounting estimates.

#### 9. Leases

A right-of-use asset is depreciated systematically over the lease term.

Lease payments are allocated to finance costs and the repayments of the remaining balance of a lease liability in order to produce a constant rate of interest on the remaining balance of the lease liability. The finance costs are presented separately from the depreciation charge for the right-of-use assets in the consolidated statement of profit or loss.

A lease liability under a lease transaction is measured at the discounted present value of the total lease payments that are not paid at the commencement date of the lease. A right-of-use asset is initially measured at the amount of the initial measurement of the lease liability, adjusted by any initial direct costs, prepaid lease payments, and other elements, together with costs for the restoration and other obligations required by the lease contract.

The Group determines whether an arrangement is, or contains, a lease based on the substance of the arrangement even if the arrangement does not take the legal form of a lease.

Lease payments relating to leases with a lease term of 12 months or less and those for which the underlying asset is of low value are recognized as an expense on either a straight-line basis over the lease term or another systematic basis

#### 10. Impairment of Non-financial Assets

The Group assesses whether there is any indication of impairment for each asset. When an event or change in circumstance indicates that the carrying amount might not be recoverable, the asset is tested for impairment. Intangible assets with indefinite useful lives and goodwill are, regardless of whether there is an indication of impairment or not, tested for impairment annually at a cash-generating unit (CGU) level by estimating the recoverable amount of the CGU to which the asset belongs.

Impairment tests are performed by estimating the recoverable amount of an asset or CGU and comparing it with the carrying amount. For the purpose of impairment testing, individual assets are grouped at the lowest levels for which there are separately identifiable cash flows. Goodwill is allocated to each CGU or a group of CGUs that is expected to benefit from the synergies of the business combination. The recoverable amount is the higher of fair value less cost to sell the asset and its value in use. In calculating the value in use, the estimated future cash flows are discounted to the present value using a discount rate that reflects the time value of money and inherent risks of the asset.

The Group assesses at the end of the fiscal year the possibility of reversal of impairment losses recognized in prior years for property, plant and equipment and intangible assets other than goodwill.

# 11. Employee Benefits

#### (1) Short-term Employee Benefits

Short-term employee benefits are recognized as expenses on an undiscounted basis when related services are rendered. Short-term employee benefits, such as bonuses and paid annual leaves, are recognized as liabilities for the amounts estimated to be paid based on the applicable plans when the Group has legal or constructive obligations for such payments and when the obligations can be reliably estimated.

# (2) Retirement Benefits

The Group has a defined contribution plan and a defined benefit plan.

(i) Defined contribution plan

Under a defined contribution plan, the employer contributes a fixed amount to an independent company and has no legal or constructive obligation to pay an amount in excess of the contributed amount. Therefore, the amount of contribution to be paid to the defined contribution plan is recognized as an expense in the period in which employees render related services to the Group.

(ii) Defined benefit plan

The Group determines the present value of defined benefit obligations and the related current service cost and past service cost using the projected unit credit method for each plan individually.

The discount rate is determined by reference to yields at the end of the fiscal year on high quality corporate bonds corresponding to a discounting period set based on a period until the expected date of benefit payment in each future fiscal year.

The present value of the defined benefit obligations less the fair value of the plan assets is recognized as an asset or liability.

Service cost, past service cost, and interest cost on the net defined benefit liability (asset) are recognized in profit or loss. Remeasurements of the net defined benefit liability (asset) are recognized in its entirety in other comprehensive income in the period in which they occur and are immediately transferred to retained earnings.

#### (3) Other Long-term Employee Benefits

Long-term employee benefits other than retirement benefits are determined by discounting future benefits that employees are entitled to receive as a consideration for their current and past services to the present value.



#### 12. Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, when it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and when the amount of the obligation can be reliably estimated. When the time value of money is significant, the provisions are determined by discounting the estimated future cash flows to the present value at a pre-tax discount rate that reflects the time value of money and the risks specific to the obligation.

#### 13. Revenue

The Group recognizes revenue in the amount that reflects a consideration to which the Group expects to be entitled in exchange for the transfer of goods and services to customers, based on the following five-step approach:

- Step 1: Identify the contracts with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to separate performance obligations
- Step 5: Recognize revenue when the entity satisfies a performance obligation

Revenue from the sale of goods is recognized when the control of goods is transferred to customers. Expected returns, discounts, rebates, and other items are deducted from revenue. The amount of returns is derived by estimating an expected return rate of goods based on historical data and other information. The amount of discounts and rebates is derived by estimating future payments based on the contract or through other means. Please also refer to 7. "REVENUE."

#### 14. Finance Income and Finance Costs

Finance income mainly comprises interest income, dividend income, foreign currency gain, and changes in the fair value of financial instruments measured at fair value through profit or loss. Interest income is recognized when it occurs using the effective interest method. Dividend income is recognized when the Group's right to receive payment is established. Finance costs mainly comprise interest expenses, foreign currency loss, and changes in the fair value of financial instruments measured at fair value through profit or loss. Interest expenses are recognized when they occur using the effective interest method.

# 15. Income Taxes

Income taxes comprise current taxes and deferred taxes. They are recognized in profit or loss, except for the items arising from business combinations, the items recognized in other comprehensive income, and the items directly recognized in equity.

Current taxes are measured as the amount that is expected to be paid to or refunded for current taxable profit based on the tax rates and the tax laws that have been enacted or substantially enacted by the end of the fiscal year.

Deferred taxes are recognized, through an asset-and-liability approach, for the differences (temporary differences) between the tax base of assets and liabilities and their carrying amount for accounting purposes at the end of the fiscal year.

However, deferred tax assets and liabilities are not recognized for the following temporary differences:

- temporary differences arising from the initial recognition of goodwill;
- differences arising from the initial recognition of an asset or liability in a transaction that is not a business combination and that affects neither accounting nor taxable profit (loss); and
- taxable temporary differences associated with investments in subsidiaries or associates, to the extent that the Group can control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to taxable profit for the fiscal year in which the temporary differences will be reversed. Deferred tax assets are recognized for unused tax losses, unused tax credits, and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which they can be utilized. Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to set off current tax assets against current tax liabilities and when income taxes are levied by the same taxation authority on the same taxable entity.

#### 16. Equity

# (1) Share Capital and Share Premium

The issue prices of equity financial instruments issued by the Company are recognized in share capital and share premium. Transaction costs directly attributed to the issuance are deducted from equity.

# (2) Treasury Shares

When treasury shares are acquired, the acquisition cost is recognized as a deduction item from equity. When treasury shares are disposed of, any difference between the carrying amount and the consideration received at the time of disposal is recognized in share premium.

# 17. Earnings per Share

Basic earnings per share are calculated by dividing profit attributable to ordinary shareholders of the parent company by the weighted-average number of ordinary shares outstanding (after adjusting for treasury shares) during each calculation period.

Diluted earnings per share is calculated by adjusting the effect of all dilutive potential ordinary shares.

#### 18. Share-based Payment

The Group has adopted a restricted stock compensation plan for payments to the Company's members of the Board excluding outside members based on equity-settled shares. Consideration for services received is measured at fair value of the Company's shares at the grant date, recognized as an expense in the consolidated statement of profit or loss over the vesting period starting from the grant date, and the corresponding amount is recognized as an increase in equity in the consolidated statement of financial position.

#### 19. Discontinued Operations

The Group classifies its business operation, a unit for managerial decision making, as a discontinued operation if it has been disposed of, or meets the criteria to be classified as held for sale.

#### 4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES, AND ASSUMPTIONS

To prepare consolidated financial statements in conformity with IFRS, the Group uses judgments, accounting estimates, and assumptions that have an impact on the application of accounting policies and the reported amounts of assets, liabilities, revenues, and expenses. Estimates and assumptions are based on management's best judgments made based on various factors which are considered to be reasonable in accordance with past results and conditions. By their nature, actual results may differ from these estimates and assumptions.

These estimates and assumptions, the basis of the estimates, are reviewed on an ongoing basis. The effects of any revisions to these estimates are recognized in the period of the revisions and future periods which are impacted by the revisions.

Although it is still uncertain when COVID-19 and the Ukraine situation will settle down, the Group assumes that these factors will not significantly affect its operating environment.

However, given that the above assumptions used for estimates involve a lot of uncertainties, any changes in the operating environment may affect the estimates and assumptions.

Information related to judgments made in the process of applying accounting policies that have a significant impact on the consolidated financial statements is as follows:

- Scope of consolidated subsidiaries (3. "SIGNIFICANT ACCOUNTING POLICIES (1) Basis of Consolidation")
- Revenue recognition (3. "SIGNIFICANT ACCOUNTING POLICIES (13) Revenue," 7. "REVENUE")

Estimates and assumptions that have a significant impact on the amounts recognized in the consolidated financial statements are as follows:

• Measurement of inventories (10. "INVENTORIES")

Inventories are measured at cost. When their net realizable value at the end of a reporting period falls below their cost, inventories are measured at such net realizable value and, in principle, the difference between the net realizable value and the cost is recognized as cost of sales. The net realizable value is the estimated selling price in the ordinary course of business less estimated cost required for completion and estimated selling expenses.

The estimates can be affected by factors such as uncertain future changes in the market environment. A loss may arise in the event of significant decline in the net realizable value.

- Impairment of non-financial assets (15. "IMPAIRMENT OF NON-FINANCIAL ASSETS")
  Impairment tests for non-financial assets are conducted by calculating the recoverable amounts based on a number of assumptions and estimates, such as assumptions for measuring fair value of CGUs after deducting the costs of disposal, or estimates of future cash flows of CGUs and assumptions of discount rates for calculating their value in use. These assumptions and estimates might cause significant revisions to the amount of impairment losses as a result of uncertain future changes in economic conditions. Estimates and assumptions of the significant CGUs for which indication of impairment was identified in the fiscal year ended December 31, 2022 are described in 15. "IMPAIRMENT OF NON-FINANCIAL ASSETS."
- Recoverability of deferred tax assets (16. "INCOME TAXES")
  In calculating income taxes, estimates and judgments are required for various factors, such as the interpretation of tax laws and regulations and the results of tax investigations in prior years. Therefore, the amount recognized as income taxes may differ from the amount actually imposed. Furthermore, deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized;

however, the timing and amount of available taxable profits may be affected by uncertain future changes in economic conditions. If the actual timing and amount differ from their estimates, they might cause significant changes in the amount to be recognized in the following fiscal years.

# **Financial Section**

· Measurement of defined benefit obligations (20. "EMPLOYEE BENEFITS")

The present value of defined benefit obligations and relevant service costs are calculated based on actuarial assumptions. In determining actuarial assumptions, estimates and judgments on a broad range of variables, such as discount rates and salary increase rates, are required.

The Group has obtained an external actuary's advice regarding the appropriateness of actuarial assumptions, including these variables.

Actuarial assumptions are determined based on management's best estimates and judgments; however, they may be affected by uncertain future changes in economic conditions and the amendment or promulgation of relevant laws and regulations. Any revision to actuarial assumptions, when necessary, might cause significant changes in the amounts to be recognized in the consolidated financial statements in the following fiscal years.

Valuation of financial instruments (31. "FINANCIAL INSTRUMENTS")

The Group uses valuation techniques using inputs that are unobservable in the market in measuring the fair value of certain financial instruments which are categorized as Level 3. Unobservable inputs may be affected by uncertain future changes in economic conditions. When revisions are needed, they might cause significant changes in the amounts to be recognized in the following fiscal years.

Contingent liabilities (36. "CONTINGENT LIABILITIES")

For contingent liabilities, items which may have a material impact on future business operations are disclosed by considering all available evidence at the end of the fiscal year and taking into account the likelihood and financial impact.

# 5. NEW STANDARDS AND INTERPRETATIONS NOT YET APPLIED

There are no significant standards or interpretations that have been established or amended by the date of approval of the consolidated financial statements but have not been applied by the Group as of December 31, 2022.

#### **6. SEGMENT INFORMATION**

#### 1. Outline of Reportable Segments

The Group's business segments are organizational units for which the Group is able to obtain discrete financial information in order for the Company's Board of Directors to regularly review performance to determine the distribution of management resources and evaluate business results.

The Group classifies organizational units by product and service. Each organizational unit plans domestic or overseas general strategies for its products and services and operates its business.

As part of commercial tire business strategy, in the fiscal year ended December 31, 2021, the Group began operations under a new management control structure after launching a new organization named Yokohama Off-Highway Tires ("YOHT") consisting of the Company's off-highway tire ("OHT") business and Alliance Tire Group ("ATG"), a Yokohama Rubber Group company.

In further expanding the business, the Group reassessed the similarity and other factors of customers and product features and changed its business segment structure from the first quarter of the fiscal year ended December 31, 2022. Specifically, ATG has been renamed to YOHT and consolidated into the Tires segment. As a result, the previous three-segment structure consisting of Tires, MB and ATG has now been changed to a two-segment structure consisting of Tires and MB.

Segment information for the fiscal year ended December 31, 2021 is disclosed based on the new reportable segment structure.

Major products in each reportable segment

Reportable segment	Major products
Tires	Tires for passenger cars, trucks and buses, light trucks, agricultural machinery, construction equipment, industrial equipment, forestry machinery, etc.; tire tubes; aluminum alloy wheels; and auto supplies
MB	Conveyor belts, hoses, pneumatic marine fenders, oil fences, marine hoses, and aerospace products

# 2. Information on Segment Revenues and Results

The accounting methods applied to the reportable segments are the same as those described in 3. "SIGNIFICANT ACCOUNTING POLICIES."

The figures related to reportable segments are based on business profit. Intersegment revenues are based on prevailing market prices.

As a result of having classified the Hamatite business of the MB segment into discontinued operations in the fiscal year ended December 31, 2021, revenue from the segment has been reclassified as the amount of continuing operations excluding the amount of revenue from discontinued operations.

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

	Millions of Yen					
	Reportable segment		Others		Adjustments	
	Tires	MB	(Note 1)	Total	(Note 3)	Consolidated
Revenues						
Revenue from external customers	¥ 577,487	¥ 84,438	¥ 8,884	¥ 670,809	¥ —	¥ 670,809
Intersegment revenue	1,458	130	8,603	10,192	(10,192)	_
Total	¥ 578,946	¥ 84,569	¥ 17,487	¥ 681,001	¥ (10,192)	¥ 670,809
Segment profit						
(business profit) (Note 2)	57,223	3,781	1,096	62,100	62	62,162
Other income and expenses						21,474
Operating profit						83,636
(Other significant items) (Note 4)						
Depreciation and amortization	33,717	2,870	103	36,690	1,011	37,701
Impairment losses	93	_	_	93	_	93
Capital expenditures	35,477	2,750	94	38,321	438	38,759

#### Notes:

- 1. "Others" includes the sports business.
- 2. Segment profit (business profit) is calculated by deducting cost of sales and selling, general, and administrative expenses from revenues.
- 3. Segment profit adjustments include the elimination of intersegment transactions.
- 4. Depreciation and capital expenditures for right-of-use assets are not included.

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

	Millions of Yen					
	Reportable s	egment	Others		Adjustments	
	Tires	MB	(Note 1)	Total	(Note 3)	Consolidated
Revenues						
Revenue from external customers	¥ 754,309	¥ 96,248	¥ 9,919	¥ 860,477	¥ —	¥ 860,477
Intersegment revenue	1,212	146	10,465	11,823	(11,823)	_
Total	¥ 755,521	¥ 96,394	¥ 20,384	¥ 872,300	¥ (11,823)	¥ 860,477
Segment profit						
(business profit) (Note 2)	66,843	3,965	(758)	70,050	40	70,089
Other income and expenses						(1,238)
Operating profit						68,851
(Other significant items)						
(Note 4)						
Depreciation and amortization	37,777	2,964	101	40,841	1,042	41,883
Impairment losses	247	38	_	285	_	285
Capital expenditures	48,678	3,895	332	52,904	2,038	54,942

	Thousands of U.S. Dollars						
	Reportable	segment	Others	-	Adjustments		
	Tires	MB	(Note 1)	Total	(Note 3)	Consolidated	
Revenues		,					
Revenue from external customers	\$ 5,684,322	\$ 725,308	\$ 74,746	\$ 6,484,376	\$ —	\$ 6,484,376	
Intersegment revenue	9,133	1,100	78,861	89,094	(89,094)	_	
Total	\$ 5,693,454	\$ 726,409	\$ 153,607	\$ 6,573,471	\$ (89,094)	\$ 6,484,376	
Segment profit							
(business profit) (Note 2)	503,716	29,878	(5,716)	527,879	301	528,180	
Other income and expenses				-		(9,331)	
Operating profit				-		518,849	
(Other significant items)							
(Note 4)							
Depreciation and amortization	284,677	22,335	761	307,772	7,849	315,621	
Impairment losses	1,862	288	_	2,150	_	2,150	
Capital expenditures	366,828	29,348	2,500	398,677	15,354	414,031	

# **Financial Section**

#### Notes:

- 1."Others" includes the sports business.
- Segment profit (business profit) is calculated by deducting cost of sales and selling, general, and administrative expenses from revenues.
- 3. Segment profit adjustments include the elimination of intersegment transactions.
- 4. Depreciation and capital expenditures for right-of-use assets are not included.

# 3. Revenue from External Customers by Product and Service Category

Disclosure is omitted because product and service categories are the same as the reportable segments.

#### 4. Geographic Information

(1) Revenue from External Customers

Revenue from external customers by area is presented in 7. "REVENUE."

# (2) Non-current Assets

	Millions	Thousands of U.S. Dollars	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Japan	¥ 151,277	¥ 146,428	\$ 1,139,996
United States of America ("USA")	57,925	51,610	436,512
India	184,280	146,061	1,388,695
China	32,432	33,017	244,402
Philippines	29,944	29,767	225,649
Others	64,697	59,629	487,544
Total	¥ 520,555	¥ 466,511	\$ 3,922,798

#### Note:

Non-current assets are classified based on the location of each company in the Group. They exclude other financial assets, assets for retirement benefits, and deferred tax assets.

# 5. Information on Major Customers

There was no single external customer that accounted for 10% or more of revenue on the consolidated statement of profit or loss.

# 7. REVENUE

### 1. Disaggregation of Segment Revenues by Geographic Area

As a result of having classified the Hamatite business of the MB segment into discontinued operations in the fiscal year ended December 31, 2021, revenue from the segment has been reclassified as the amount of continuing operations excluding the amount of revenue from discontinued operations.

In addition, beginning from the first quarter of the year ended December 31, 2022, the reporting segment "ATG" has been consolidated into the "Tires" segment. Please refer to 6. "SEGMENT INFORMATION" for details on changes to segment.

Fiscal year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

	Millions of Yen					
	Tires	Tires MB		Total		
Areas		'				
Japan	¥ 182,437	¥ 48,669	¥ 6,580	¥ 237,686		
North America	183,374	16,270	272	199,917		
Asia	87,756	14,695	2,032	104,484		
Others	123,919	4,804	_	128,723		
Total	¥ 577,487	¥ 84,438	¥ 8,884	¥ 670,809		

# Note:

Revenues are classified based on the location of customers and exclude intersegment transactions. North America mainly refers to the USA (¥187,562 million).

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

		Millions of Yen						
	Tires	MB	Others	Total				
Areas								
Japan	¥ 199,140	¥ 51,837	¥ 6,808	¥ 257,784				
North America	279,384	23,626	269	303,279				
Asia	116,713	15,462	2,843	135,017				
Others	159,073	5,323	· —	164,396				
Total	¥ 754,309	¥ 96,248	¥ 9,919	¥ 860,477				
		Thousands of U.S. Dollars						
	Tires	MB	Others	Total				
Areas								
Japan	\$ 1,500,675	\$ 390,632	\$ 51,301	\$ 1,942,608				
North America	2,105,379	178,044	2,024	2,285,448				
Asia	879,523	116,519	21,421	1,017,463				
Others	1,198,745	40,113	· —	1,238,858				
Total	\$ 5,684,322	\$ 725,308	\$ 74,746	\$ 6,484,376				

#### Note:

Revenues are classified based on the location of customers and exclude intersegment transactions. North America mainly refers to the USA (¥284,938 million, \$2,147,237 thousand).

The Group is engaged in the manufacturing of products in the Tires, MB, and Others segments, and conducts a range of business with the tire business at its core. In these businesses, the Group itself is a party to contracts with customers.

Since performance obligations for revenues from automakers, retailers, and other business operators, all of which are the major customers of the Tires and MB segments, are satisfied when the Group's products are delivered to customers, revenues are recorded at that point in time. This is because control over the Group's products is deemed to be transferred on delivery, the point in time in which customers can use and sell the products on their own will and obtain benefits from the products.

The amounts of contractual considerations include no significant financing components since they are paid primarily within six months from the delivery of products to customers.

In the Tires and MB segments, the Group determines product transaction prices when initiating transactions with each customer. For some transactions which provide sales rebates and sales fees according to the volume of transactions and other aspects for certain periods from several months to one year, the Group adjusts transaction prices by estimating the amounts of variable consideration based on contractual conditions and other factors. Refund liabilities relating to these adjustments are included in "Other financial liabilities." Since the variable consideration payable to customers is reasonably estimable, it is determined that significant reversal of cumulative revenue recognized will not occur and thus the estimate of variable consideration will not be constrained.

The Tires and MB segments do not classify product warranties as independent performance obligations or allocate part of transaction prices to product warranties because they do not provide service-type product warranties, such as providing services more than repairing defects that existed at the time of sale.

The Tires segment, which records a reversal of revenues from winter tires mainly sold in Japan partly due to returns from winter to spring, reduces revenues by estimating expected returns, and the right to collect products to be returned is recognized as a returned asset in "Other current assets."

# 2. Contract Balance

The Group's contract balance consists of receivables (notes and accounts receivables) arising from contracts with customers and contract liabilities (advances received). The balance of receivables arising from contracts with customers is presented in 9. "TRADE AND OTHER RECEIVABLES." The balance of contract liabilities recorded under "Other current liabilities" is as follows:

During the fiscal years ended December 31, 2021 and 2022, the amounts of revenues recognized from the performance obligations satisfied in the previous periods are immaterial.

	Millions	of Yen	Thousands of U.S. Dollars
	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	<b>2022</b> (December 31, 2022)
Contract liabilities	¥ 1,738	¥ 1,446	\$ 10,896

# **Financial Section**

# 3. Transaction Prices Allocated to Remaining Performance Obligations

The Group has no significant transactions whose respective contract period exceeds one year. The Group applies the practical expedient set forth in Paragraph 121 of IFRS 15 and does not disclose information about its remaining performance obligations that have original expected durations of one year or less.

Moreover, consideration arising from contracts with customers includes no significant amounts excluded from transaction prices.

# 4. Assets Recognized from Costs for Obtaining or Performing Contracts with Customers

The Group has no additional costs for obtaining contracts or costs for performing contracts which should be recognized as assets.

#### 8. CASH AND CASH EQUIVALENTS

The breakdown of cash and cash equivalents is as follows:

	Millions	of Yen	Thousands of U.S. Dollars
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Cash and deposits	¥ 63,238	¥ 33,191	\$ 476,546
Time deposits with maturities of three months or less	12,335	9,333	92,953
Total	¥ 75,572	¥ 42,523	\$ 569,498

#### 9. TRADE AND OTHER RECEIVABLES

The breakdown of trade and other receivables is as follows:

	Millions	U.S. Dollars		
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
Notes and accounts receivable-trade	¥ 182,511	¥ 158,930	\$ 1,375,367	
Others	14,780	14,101	111,377	
Allowance for doubtful receivables	(3,542)	(3,162)	(26,689)	
Total	¥ 193,749	¥ 169,869	\$ 1,460,056	

The amounts less allowance for doubtful receivables are presented in the consolidated statement of financial position. Trade and other receivables are classified as financial assets measured at amortized cost.

Credit risk management and the fair value of trade and other receivables are presented in 31. "FINANCIAL INSTRUMENTS."

# **10. INVENTORIES**

The breakdown of inventories is as follows:

	Millions	Millions of Yen		
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
Merchandise and finished goods	¥ 152,697	¥ 100,353	\$ 1,150,691	
Work in progress	9,319	7,326	70,224	
Raw materials and supplies	54,376	45,020	409,768	
Total	¥ 216,392	¥ 152,700	\$ 1,630,683	

The valuation loss on inventories was ¥1,994 million and ¥1,371 million (\$10,334 thousand) for the fiscal years ended December 31, 2021 and 2022, respectively.

The valuation loss on inventories for the fiscal year ended December 31, 2021 includes fixed manufacturing costs of ¥12 million that incurred during the operation restriction period based on the request from government agencies to prevent the spread of COVID-19.

The valuation loss on inventories for the fiscal year ended December 31, 2022 includes fixed manufacturing costs of ¥52 million (\$395 thousand) that incurred during the operation restriction period to prevent the spread of COVID-19.

# **11. OTHER FINANCIAL ASSETS**

The breakdown of other financial assets is as follows:

	Millions of Yen				Thousands of U.S. Dollars	
	(December	<b>2022</b> 31, 2022)	(December	2021 31, 2021)	(December	<b>2022</b> 31, 2022)
Non-derivative financial assets measured				,		
at amortized cost						
Loans	¥	317	¥	250	\$	2,389
Others		3,848		6,409		29,001
Allowance for doubtful receivables		(118)		(106)		(893)
Non-derivative financial assets measured						
at fair value through profit or loss						
Others		179		182		1,347
Non-derivative financial assets measured						
at fair value through other comprehensive income						
Shares	1	02,935		113,972		775,699
Others		610		596		4,599
Derivative assets		8,626		3,995		65,006
Total	¥ 1	16,398	¥	125,299	\$	877,148
Current assets		3,594		4,983		27,080
Non-current assets	1	12,804	•	120,316		850,068
Total	¥ 1	16,398	¥	125,299	\$	877,148

The amounts less allowance for doubtful receivables are presented in the consolidated statement of financial position.

Derivative assets are classified as financial assets measured at fair value through profit or loss, except for those to which hedge accounting is applied.

Major equity financial assets measured at fair value through other comprehensive income and their fair values were as follows:

Fiscal Year Ended December 31, 2021 (December 31, 2021)

	Millions of Yen
Share issuer	Amount
TOYOTA MOTOR CORPORATION	¥ 36,449
Zeon Corporation	30,100
Honda Motor Co., Ltd.	10,125
SUZUKI MOTOR CORPORATION	3,649
ADEKA Corporation	2,825

Fiscal Year Ended December 31, 2022 (December 31, 2022)

	Millions of Yen
Share issuer	Amount
TOYOTA MOTOR CORPORATION	¥ 31,377
Zeon Corporation	25,060
Honda Motor Co., Ltd.	9,504
SUZUKI MOTOR CORPORATION	3,519
ADEKA Corporation	2,382
	Thousands of U.S. Dollars
	U.S. Dollars
Share issuer	Amount
Share issuer TOYOTA MOTOR CORPORATION	
	Amount
TOYOTA MOTOR CORPORATION	Amount \$ 236,449
TOYOTA MOTOR CORPORATION Zeon Corporation	Amount \$ 236,449 188,848

These shares are classified as equity financial assets measured at fair value through other comprehensive income as they are mainly held for strategic investment purposes.

# **Financial Section**

The Group sells (derecognizes) equity financial assets measured at fair value through other comprehensive income to streamline and effectively use the assets it holds.

The fair values and accumulated gains or losses recognized in other comprehensive income in equity at the time of sale in each fiscal year were as follows:

	Millions	Millions of Yen		
	2022	2021	2022	
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)	(From January 1, 2022 to December 31, 2022)	
Fair value	¥ 7,701	¥ 296	\$ 58,035	
Accumulated gains (losses) recognized in other components of equity (Note)	¥ 3,847	¥ 130	\$ 28,990	

# Note:

Accumulated gains or losses recognized in other components of equity were transferred to retained earnings at the time of sale.

The breakdown of dividends received which are recognized from equity financial instruments is as follows:

	Millions	Millions of Yen			
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)		
Investments derecognized during the year	¥ 156	¥ 24	\$ 1,176		
Investments held as of the end of the year	3,794	2,658	28,591		
Total	¥ 3,950	¥ 2,683	\$ 29,767		

# 12. PROPERTY, PLANT AND EQUIPMENT

# Changes

Changes in the cost, accumulated depreciation, and accumulated impairment losses and carrying amounts of property, plant and equipment were as follows:

		Millions of Yen							
Cost	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Construction in progress	Right-of-use assets	Total		
Balance at January 1, 2021	¥ 213,382	¥ 505,558	¥ 90,223	¥ 47,481	¥ 16,975	¥ 51,170	¥ 924,789		
Individual acquisition	3,021	2,416	2,092	_	30,929	14,091	52,549		
Sale or disposal	(10,594)	(37,806)	(7,907)	(690)	(130)	(1,530)	(58,656)		
Exchange differences on translating									
foreign operations	7,212	23,467	3,558	833	922	1,767	37,758		
Transfer from construction in									
progress	3,300	17,199	5,424	17	(25,944)	(1)	(6)		
Others	865	(1,028)	(577)	318	83	(210)	(550)		
Balance at December 31, 2021	¥ 217,185	¥ 509,805	¥ 92,814	¥ 47,959	¥ 22,835	¥ 65,286	¥ 955,884		
Individual acquisition	193	1,506	1,955	_	49,660	6,848	60,163		
Sale or disposal	(2,071)	(8,986)	(5,680)	(674)	(221)	(560)	(18,193)		
Exchange differences on translating									
foreign operations	11,473	29,845	4,704	1,716	2,448	3,332	53,518		
Transfer from construction in									
progress	8,317	29,711	6,252	3,163	(47,443)	_	_		
Others	(1,033)	(147)	17	(1,449)	1,025	(354)	(1,942)		
Balance at December 31, 2022	¥ 234,064	¥ 561,734	¥ 100,062	¥ 50,715	¥ 28,304	¥ 74,552	¥ 1,049,431		

			Thous	ands of U.S. D	ollars		
Cost	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Construction in progress	Right-of-use assets	Total
Balance at December 31, 2021	\$ 1,636,665	\$ 3,841,789	\$ 699,425	\$ 361,412	\$ 172,079	\$ 491,980	\$ 7,203,349
Individual acquisition	1,454	11,346	14,734	_	374,229	51,609	453,373
Sale or disposal	(15,607)	(67,719)	(42,800)	(5,081)	(1,669)	(4,221)	(137,096)
Exchange differences on translating							
foreign operations	86,461	224,905	35,450	12,933	18,445	25,108	403,303
Transfer from construction in							
progress	62,672	223,895	47,115	23,835	(357,518)	_	_
Others	(7,786)	(1,108)	126	(10,923)	7,727	(2,668)	(14,632)
Balance at December 31, 2022	\$ 1.763.859	\$ 4.233.109	\$ 754.050	\$ 382,177	\$ 213.293	\$ 561.807	\$ 7.908.296

	Millions of Yen							
Accumulated depreciation and accumulated impairment losses	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Constru		Right-of-use assets	Total
Balance at January 1, 2021	¥ (124,784)	¥ (391,152)	¥ (76,627)	¥ (653)	¥	(27)	¥ (20,396)	¥ (613,639)
Depreciation	(6,399)	(21,291)	(6,297)	_		_	(7,272)	(41,259)
Impairment losses	(27)	(8)	(10)	(42)		_	_	(87)
Sale or disposal	9,314	35,860	7,562	267		6	1,305	54,313
Exchange differences on translating								
foreign operations	(2,832)	(14,774)	(2,668)	(45)		(2)	(513)	(20,835)
Others	(12)	1,286	425	(57)		_	250	1,892
Balance at December 31, 2021	¥ (124,740)	¥ (390,080)	¥ (77,615)	¥ (530)	¥	(23)	¥ (26,627)	¥ (619,616)
Depreciation	(6,868)	(23,119)	(7,315)	_		_	(8,031)	(45,334)
Impairment losses	(12)	(88)	(12)	(173)		_	_	(285)
Sale or disposal	1,892	8,503	5,532	189		_	528	16,644
Exchange differences on translating								
foreign operations	(4,663)	(19,615)	(3,504)	(67)		(4)	(1,012)	(28,865)
Others	677	19	47	_		_	215	958
Balance at December 31, 2022	¥ (133.715)	¥ (424.380)	¥ (82.868)	¥ (581)	¥	(27)	¥ (34.927)	¥ (676,498)

	Thousands of U.S. Dollars						
Accumulated depreciation and accumulated impairment losses	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Construction in progress	Right-of-use assets	Total
Balance at December 31, 2021	\$ (940,011)	\$ (2,939,560)	\$ (584,894)	\$ (3,997)	\$ (176)	\$ (200,659)\$	6 (4,669,297)
Depreciation	(51,760)	(174,218)	(55,127)	_	_	(60,521)	(341,626)
Impairment losses	(94)	(663)	(90)	(1,303)	_		(2,150)
Sale or disposal	14,255	64,075	41,686	1,427	_	3,982	125,427
Exchange differences on translating							
foreign operations	(35,141)	(147,817)	(26,405)	(506)	(27)	(7,623)	(217,519)
Others	5,103	142	354	_	_	1,620	7,218
Balance at December 31, 2022	\$ (1,007,647)	\$ (3,198,041)	\$ (624,477)	\$ (4,379)	\$ (203)	\$ (263,201)	5 (5,097,947)

	Millions of Yen							
		Machinery,				Right-of-use		
	Buildings and	equipment,	Tools, furniture,		Construction	assets		
Carrying amount	structures	and vehicles	and fixtures	Land	in progress	(Note)	Total	
Balance at January 1, 2021	¥ 88,598	¥ 114,406	¥ 13,596	¥ 46,829	¥ 16,948	¥ 30,773	¥ 311,150	
Balance at December 31, 2021	92,446	119,726	15,198	47,429	22,812	38,658	336,269	
Balance at December 31, 2022	100,349	137,354	17,194	50,134	28,277	39,625	372,933	

	Thousands of U.S. Dollars						
		Machinery,				Right-of-use	
	Buildings and	equipment,	Tools, furniture,		Construction	assets	
Carrying amount	structures	and vehicles	and fixtures	Land	in progress	(Note)	Total
Balance at December 31, 2022	\$ 756,212	\$ 1,035,069	\$ 129,573	\$ 377,798	\$ 213,091	\$ 298,607	\$ 2,810,349

\$ 298,607

\$ 42,616

The carrying amounts of right-of-use assets were as follows:

			Millions of Yen		
Right-of-use assets	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Total
Balance at January 1, 2021	¥ 22,219	¥ 2,811	¥ 910	¥ 4,832	¥ 30,773
Balance at December 31, 2021	28,974	3,366	897	5,422	38,658
Balance at December 31, 2022	29,223	3,840	907	5,655	39,625
		Thou	usands of U.S. Dol	lars	
Right-of-use assets	Buildings and structures	Machinery, equipment, and vehicles	Tools, furniture, and fixtures	Land	Total

\$ 220,218

Depreciation of property, plant and equipment is included in "Cost of sales" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

\$ 6,837

\$ 28,936

# 13. GOODWILL AND INTANGIBLE ASSETS

Balance at December 31, 2022

# 1. Changes

Changes in the cost, accumulated amortization, and accumulated impairment losses and carrying amounts of goodwill and intangible assets were as follows:

		Millions of Yen				
Cost	Goodwill	Customer related	Trademark right	Software	Others	Total
Balance at January 1, 2021	¥ 80,706	¥ 26,232	¥ 13,599	¥ 6,850	¥ 7,164	¥ 134,550
Individual acquisition	_	_	0	341	29	370
Sale or disposal	_		_	(118)	(154)	(272)
Exchange differences on translating						
foreign operations	9,424	2,902	1,557	203	283	14,370
Others	_	_	_	(936)	(30)	(966)
Balance at December 31, 2021	¥ 90,130	¥ 29,134	¥ 15,156	¥ 6,340	¥ 7,292	¥ 148,052
Individual acquisition	_	_	_	511	2	514
Sale or disposal	_		_	(131)	(64)	(195)
Exchange differences on translating						
foreign operations	14,114	4,454	2,390	295	433	21,686
Others	_	_	_	(1,671)	(9)	(1,680)
Balance at December 31, 2022	¥ 104,244	¥ 33,588	¥ 17,546	¥ 5,344	¥ 7,654	¥ 168,376

		Thousands of U.S. Dollars				
Cost	Goodwill	Customer related	Trademark right	Software	Others	Total
Balance at December 31, 2021	\$ 679,202	\$ 219,548	\$ 114,212	\$ 47,778	\$ 54,948	\$ 1,115,687
Individual acquisition	_	_	_	3,854	16	3,870
Sale or disposal	_	_	_	(990)	(479)	(1,470)
Exchange differences on translating						
foreign operations	106,360	33,567	18,008	2,223	3,262	163,420
Others	_	_	_	(12,594)	(64)	(12,659)
Balance at December 31, 2022	\$ 785,562	\$ 253,115	\$ 132,220	\$ 40,270	\$ 57,682	\$ 1,268,849

# **Financial Section**

	Millions of Yen						
Accumulated amortization and accumulated impairment losses	Goodwill	Customer related	Trademark right	Software	Others	Total	
Balance at January 1, 2021	¥ —	¥ (9,259)	¥ (317)	¥ (3,148)	¥ (4,639)	¥ (17,363)	
Amortization	_	(2,119)	(74)	(1,386)	(722)	(4,301)	
Impairment losses	_	_	_	(6)		(6)	
Sale or disposal	_	_	_	115	144	259	
Exchange differences on translating							
foreign operations	_	(1,113)	(84)	(126)	(143)	(1,466)	
Others	_	_	_	1,030	19	1,049	
Balance at December 31, 2021	¥ —	¥ (12,491)	¥ (475)	¥ (3,521)	¥ (5,342)	¥ (21,829)	
Amortization	_	(2,535)	(15)	(1,268)	(766)	(4,584)	
Impairment losses	_	_	_	(0)		(0)	
Sale or disposal	_	_	_	129	35	164	
Exchange differences on translating							
foreign operations	_	(1,921)	(135)	(210)	(245)	(2,511)	
Others	_	_	_	1,783	13	1,796	
Balance at December 31, 2022	¥ —	¥ (16,947)	¥ (626)	¥ (3,087)	¥ (6,305)	¥ (26,964)	

	Thousands of U.S. Dollars					
Accumulated amortization and accumulated impairment losses	Goodwill	Customer related	Trademark right	Software	Others	Total
Balance at December 31, 2021	\$ —	\$ (94,128)	\$ (3,579)	\$ (26,536)	\$ (40,256)	\$ (164,500)
Amortization	_	(19,107)	(115)	(9,552)	(5,772)	(34,546)
Impairment losses	_	_	_	(0)	_	(0)
Sale or disposal	_	_	_	968	267	1,235
Exchange differences on translating						
foreign operations	_	(14,474)	(1,020)	(1,582)	(1,848)	(18,925)
Others	_	_	_	13,438	100	13,538
Balance at December 31, 2022	\$-	\$ (127,709)	\$ (4,715)	\$ (23,265)	\$ (47,510)	\$ (203,198)

	Millions of Yen					
Carrying amount	Goodwill	Customer related	Trademark right	Software	Others	Total
Balance at January 1, 2021	¥ 80,706	¥ 16,973	¥ 13,282	¥ 3,702	¥ 2,524	¥ 117,186
Balance at December 31, 2021	90,130	16,643	14,681	2,819	1,950	126,223
Balance at December 31, 2022	104,244	16,641	16,920	2,257	1,350	141,412

	Thousands of U.S. Dollars					
		Customer	Trademark			
Carrying amount	Goodwill	related	right	Software	Others	Total
Balance at December 31, 2022	\$ 785,562	\$ 125,406	\$ 127,506	\$ 17,005	\$ 10,173	\$ 1,065,651

Amortization of intangible assets is included in "Cost of sales" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

# 2. Intangible Assets with Indefinite Useful Lives

The carrying amounts of intangible assets with indefinite useful lives at the end of the fiscal years ended December 31, 2021 and 2022 were ¥14,644 million and ¥16,895 million (\$127,318 thousand), respectively. These assets are mainly trademark rights acquired in the business combination of YOHT, a CGU. They were deemed to have indefinite useful lives in the fiscal year ended December 31, 2022 since they will basically survive as long as the business continues.

# 3. Significant Goodwill and Intangible Assets

Goodwill at the end of the fiscal years ended December 31, 2021 and 2022 was mainly attributable to YOHT, a CGU, whose carrying amounts were ¥89,689 million and ¥103,475 million (\$779,766 thousand), respectively.

Significant intangible assets other than goodwill at the end of the fiscal years ended December 31, 2021 and 2022 were mainly customer relations of YOHT, whose carrying amounts were ¥16,642 million and ¥16,640 million (\$125,394 thousand), respectively. The remaining amortization period at the end of the fiscal year ended December 31, 2022 was seven years.

# 4. Research and Development Expenses

Research and development expenses recognized in the fiscal years ended December 31, 2021 and 2022 were ¥15,297 million and ¥16,034 million (\$120,826 thousand), respectively, which were included in "Cost of sales" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

#### 14. LEASE TRANSACTIONS

(Lease transactions as lessee)

As a lessee, the Group leases buildings and structures, machinery, equipment, and vehicles, tools, furniture, and fixtures, land, and other assets. Lease liabilities are presented in "Other financial liabilities" in the consolidated statement of financial position.

#### 1. Information on Lease-related Expenses

The breakdown of lease-related expenses was as follows:

	Millions	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	2022 (From January 1, 2022 to December 31, 2022)
Depreciation of right-of-use assets by class of underlying asset			
Buildings and structures	¥ 5,299	¥ 4,859	\$ 39,933
Machinery, equipment, and vehicles	1,555	1,567	11,715
Tools, furniture, and fixtures	413	439	3,116
Land	762	401	5,741
Other assets	2	6	16
Subtotal	8,031	7,272	60,521
Interest expenses on lease liabilities	794	634	5,982
Expense relating to short-term leases	1,567	1,014	11,807
Expense relating to leases of low-value assets	2	11	13
(excluding short-term leases)	_		
Variable lease payments	624	622	4,701
Income from subleasing right-of-use assets	341	366	2,568

#### 2. Variable Lease Payments

Lease contracts include variable lease payments, which are primarily lease payments that vary based on the number of tires kept in tire warehouses.

### 3. Extension Options and Termination Options

Extension options and termination options are mainly included in real estate leases of stores, offices, and warehouses, and the need to exercise these options is considered as appropriate for the purpose of utilizing such property for the Group's business.

# 4. Residual Value Guarantees

There are no significant lease contracts for which residual value guarantees are provided.

# 5. Lease Contracts Not Yet Commenced to Which the Lessee Is Committed

There are no significant lease contracts which had been concluded but for which leases had not yet commenced.

# 6. Restrictions or Covenants Imposed by Leases

There are no significant restrictions imposed by lease contracts (restrictions on additional borrowings or additional leases, etc.).

# 7. Sale and Leaseback Transactions

In the fiscal year ended December 31, 2021, a transaction was executed to sell the land for the head office building located in Minato-ku, Tokyo, and lease it back. Gains arising from the sale and leaseback transaction were ¥20,788 million, and the payment of ¥21,022 million was received in the same period.

There was no sale and leaseback transaction during the fiscal year ended December 31, 2022.

# 8. Short-term Leases and Leases of Low-value Assets

Lease payments relating to leases with a lease term of 12 months or less and those for which the underlying asset is of low value are recognized as an expense on either a straight-line basis over the lease term or another systematic basis.

# 15. IMPAIRMENT OF NON-FINANCIAL ASSETS

#### 1. Impairment Losses

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

Non-financial assets are grouped by the smallest CGU that generates cash inflows that are largely independent. Impairment losses were recorded on the following assets in the fiscal year ended December 31, 2021.

			Millions of Yen
Usage	Segment	Туре	Amount
	Buildings and structures  Machinery, equipment, and vehicles	Buildings and structures	¥ 27
		Machinery, equipment, and vehicles	8
Dusiness seeds	T:	Tools, furniture, and fixtures	10
Business assets	Tires	Land	42
		Software	6
		Total	93

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

Non-financial assets are grouped by the smallest CGU that generates cash inflows that are largely independent. Impairment losses were recorded on the following assets in the fiscal year ended December 31, 2022.

			Millions of Ye	n Thousands of U.S. Dollars
Usage	Segment	Туре	Amount	Amount
	Tires	Buildings	¥ 9	\$ 68
		Structures	0	2
		Machinery and equipment	88	663
Business assets		Tools, furniture, and fixtures	12	87
		Land	138	1,042
		Software	0	0
		Subtotal	247	1,862
	MB	Buildings	3	25
Business assets		Tools, furniture, and fixtures	0	3
		Land	35	261
		Subtotal	38	288
		Total	285	2,150

(Significant CGU for which an indication of impairment was identified)

Continued from the indication of impairment identified at the end of the fiscal year ended December 31, 2021 on property, plant and equipment of Yokohama Tire Manufacturing Mississippi, LLC. (USA), a consolidated subsidiary of the Company belonging to the Tires business segment, the Group again identified an indication of impairment on the same totaling ¥16,841 million (\$126,913 thousand) at the end of the fiscal year ended December 31, 2022. This was mainly attributable to a rise in personnel cost and low production efficiency arising from a continued turnover of direct workers in the US.

As a result of performing an impairment test to compare the recoverable amount of property, plant and equipment of the company and their carrying amount, the value in use of the recoverable amount exceeded the carrying amount. Therefore, no impairment losses were recognized.

The value in use is based on the company's medium-term management plan within a four-year period approved by its management and is calculated by discounting the estimated amount of future cash flows to the present value at a pre-tax discount rate of 13.1%; the amount of future cash flows is estimated based on the assumption that the business environment remains unchanged from that of the final year of the medium-term management plan during the period equivalent to the remaining economic useful lives of major assets.

Key assumptions used in estimating the value in use primarily include the production volumes based on the medium-term management plan, cost of sales ratio, total market demand, and a discount rate calculated based on a weighted-average cost of capital. Estimates based on these major assumptions are highly uncertain, and therefore, changes in major assumptions could have a significant impact on the valuation of the Company's non-current assets for the next fiscal year.

# 2. Impairment Tests on Goodwill and Intangible Assets with Indefinite Useful Lives

The Group performs impairment tests on goodwill and intangible assets with indefinite useful lives at least once a year and whenever there is an indication that an asset may be impaired.

Recoverable amounts used for impairment tests on goodwill and intangible assets with indefinite useful lives are calculated based on value in use.

Value in use is determined by using pre-tax cash-flow forecasts over a five-year period and other inputs, which are based on a management-approved business plan. For periods beyond those covered by the business plan, continuing value is determined. The plan reflects management's evaluation on the industry's future outlook and past results. In determining the continuing value, a publicly disclosed growth rate is used.

Major assumptions used as the basis of calculation of value in use are as follows:

- Long-term average growth rate of the market to which the CGU belongs used to extend cash flow forecasts Fiscal year ended December 31, 2022: 1.9% to 4.0%, Fiscal year ended December 31, 2021: 1.6% to 4.0%
- Pre-tax discount rate applied to cash flow forecasts (calculated based on a weighted-average cost of capital) Fiscal year ended December 31, 2022: 11.3%, Fiscal year ended December 31, 2021: 10.4%

Concerning the goodwill and intangible assets with indefinite useful lives, since the recoverable amount of the CGU exceeds the carrying amount, the Group considers that the recoverable amount of the CGU is unlikely to fall below the carrying amount even if the major assumptions change within a reasonable range.

#### **16. INCOME TAXES**

#### 1. Income Taxes

The breakdown of income taxes recognized through profit or loss is as follows:

	Millions	Millions of Yen	
	2022	2021	2022
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)	(From January 1, 2022 to December 31, 2022)
Current tax expense	¥ 24,285	¥ 38,132	\$ 183,008
Deferred tax expense	188	(10,048)	1,417
Total	¥ 24,473	¥ 28,084	\$ 184,425

Deferred tax expense includes expenses arising from valuation losses on deferred tax assets and the reversal of valuation losses recorded in prior fiscal years.

### 2. Reconciliation of Effective Tax Rate

The breakdown of major factors contributing to differences between the statutory effective tax rate and the actual effective tax rate is as follows.

The Company and its domestic subsidiaries were mainly subject to national corporate income tax, inhabitant tax, and enterprise tax, which, in aggregate, would result in the statutory effective tax rate of 30.3% for the fiscal years ended December 31, 2021 and 2022.

The overseas subsidiaries were subject to local corporate and other taxes.

	2022	2021
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)
Statutory effective tax rate	30.3 %	30.3 %
(Reconciliation)		
Difference between statutory effective tax rates of		
overseas consolidated subsidiaries	(2.1)	(2.9)
Permanently nondeductible expenses	0.4	0.2
Permanently nontaxable income	(0.5)	(0.4)
Tax deduction for research and development	(1.9)	(1.3)
Effect of recoverability assessment of deferred		
tax assets	(0.4)	(8.0)
Taxable temporary differences associated with		
investments in subsidiaries or associates	5.3	4.4
Foreign withholding taxes	2.2	0.2
Effect of business transfer	_	(0.7)
Others	0.9	0.8
Average actual effective tax rate	34.2 %	29.8 %



# 3. Deferred Tax Assets and Deferred Tax Liabilities

The major breakdown of deferred tax assets and deferred tax liabilities is as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
Deferred tax assets				
Liabilities for retirement benefits	¥ 10,290	¥ 9,859	\$ 77,542	
Unrealized gains	3,420	2,283	25,770	
Accrued expenses	2,101	1,897	15,834	
Accrued vacation payable	1,424	1,474	10,731	
Valuation loss on inventories	2,737	1,430	20,624	
Impairment losses	2,914	2,938	21,959	
Others	6,433	3,807	48,476	
Total deferred tax assets	29,318	23,690	220,935	
Deferred tax liabilities				
Intangible assets identified as a result of				
business combinations	(12,167)	(11,313)	(91,685)	
Liabilities for pension and severance payments	(4,993)	(4,993)	(37,626)	
Gain on receipt of stock set by pension plan	(1,581)	(1,581)	(11,914)	
Reserve for advanced depreciation of	, , ,		• • •	
non-current assets	(6,449)	(7,194)	(48,597)	
Retained earnings of overseas subsidiaries	(12,129)	(8,299)	(91,401)	
Non-current assets	(7,317)	(5,691)	(55,143)	
Unrealized gains on securities	(18,420)	(21,672)	(138,812)	
Others	(6,825)	(5,225)	`(51,430)	
Total deferred tax liabilities	(69,881)	(65,969)	(526,606)	
Net deferred tax assets (liabilities)	¥ (40,562)	¥ (42,279)	\$ (305,670)	

Net deferred tax assets and net deferred tax liabilities are included in the following items in the consolidated statement of financial position.

	Millions o	Millions of Yen	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Deferred tax assets	¥ 8,140	¥ 7,655	\$ 61,338
Deferred tax liabilities	(48,702)	(49,934)	(367,009)

Changes in net deferred tax assets and net deferred tax liabilities are as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Beginning balance	¥ (42,279)	¥ (25,618)	\$ (318,606)	
Tax expense or income recognized through profit or loss (Note)	188	(10,048)	1,417	
Amount recognized in other comprehensive income Cash flow hedges	300	(1,007)	2,261	
Gains (losses) on financial assets measured at fair value through other comprehensive income	992	(3,755)	7,473	
Remeasurements of defined benefit plans	237	(1,851)	1,784	
Total	1,529	(6,613)	11,519	
Ending balance	¥ (40,562)	¥ (42,279)	\$ (305,670)	

#### Note:

Foreign exchange translation differences are included in tax expense or income recognized through profit or loss.

The Group recognized deferred tax assets by taking into account taxable temporary differences, the estimation of taxable profit, and tax planning.

Deductible temporary differences, tax loss carryforwards, and tax credit carryforwards for which deferred tax assets were not recognized were as follows.

The amounts of deductible temporary differences, tax loss carryforwards, and tax credit carryforwards are on a tax amount basis multiplied by the effective tax rate.

	Millions o	U.S. Dollars	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Deductible temporary differences	¥ 6,233	¥ 6,358	\$ 46,969
Tax loss carryforwards and tax credit carryforwards	1,637	1,525	12,336

The tax loss carryforwards and tax credit carryforwards for which deferred tax assets were not recognized will expire as follows:

	Millions	Millions of Yen		
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
First year	¥ 280	¥ 177	\$ 2,111	
Second year	168	243	1,264	
Third year	101	189	761	
Fourth year	72	71	542	
Fifth year and after	322	301	2,426	
Indefinite	694	544	5,233	
Total	¥ 1,637	¥ 1,525	\$ 12,336	

Total taxable temporary differences associated with investments in subsidiaries or associates for which deferred tax liabilities were not recognized in the fiscal years ended December 31, 2021 and 2022 were ¥4,411 million and ¥2,038 million (\$15,365 thousand), respectively.

Deferred tax liabilities were not recognized for these temporary differences because the Group was able to control the timing of reversal of the temporary differences and it was probable that the temporary differences would not be reversed in the foreseeable future.

In the fiscal years ended December 31, 2021 and 2022, dividend payouts from the Group to shareholders had no impact on income taxes.

### 17. TRADE AND OTHER PAYABLES

The breakdown of trade and other payables is as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
Accounts and notes payable - trade	¥ 64,842	¥ 56,069	\$ 488,637	
Others	13,289	15,876	100,140	
Total	¥ 78,131	¥ 71,945	\$ 588,777	

Trade and other payables are classified as financial liabilities measured at amortized cost.



#### **18. BONDS AND BORROWINGS**

#### 1. The Breakdown of Bonds and Borrowings Is as Follows:

	Millions	of Yen	Thousands of U.S. Dollars		
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	Average interest rate	Repayment period
Short-term borrowings	¥ 85,875	¥ 50,714	\$ 647,135	2.47 %	_
Commercial papers	7,000	_	52,751	0.00	
Current portion of bonds (Note)	9,000	12,000	67,822		
Current portion of long-term					
borrowings	15,605	18,892	117,595	0.33	
Bonds (Note)	39,818	18,935	300,062		
Long-term borrowings	81,403	76,693	613,436	1.59	2024-2032
Total	238,701	177,235	1,798,801	_	
Current liabilities	117,480	81,607	885,303		
Non-current liabilities	121,221	95,628	913,499		
Total	¥ 238,701	¥ 177,235	\$ 1,798,801		

Bonds and borrowings are classified as financial liabilities measured at amortized cost.

Average interest rate is calculated based on the outstanding balances and the interest rates at December 31, 2022.

The Company's borrowings at December 31, 2021 and 2022 include those under syndicated loan agreements (total agreement amount: \$720 million and ¥54,240 million (\$408,742 thousand), respectively) concluded with the counterparty banks on June 30, 2016.

Those agreements are subject to the following financial covenants:

- From the fiscal year ended December 31, 2016, net assets recorded on the consolidated statement of financial position at the end of each fiscal year must be maintained at a designated level or higher on a year-on-year basis.
- From the fiscal year ended December 31, 2016, the Company must not record operating losses on the consolidated statement of profit or loss for two consecutive years.

The Company's borrowings at December 31, 2021 and 2022 include those under syndicated loan agreements (total agreement amount: \$52 million) concluded between ATC Tires AP Private Ltd., the Company's subsidiary, and the counterparty banks on October 21, 2020.

Those agreements are subject to the following financial covenants:

• From the end of March 2025, ATC Tires AP Private Ltd. must not record a negative net worth on the balance sheet.

The Company's borrowings at December 31, 2021 and 2022 include those under a loan agreement (total agreement amount: \$96 million) concluded between ATC Tires AP Private Ltd., the Company's subsidiary, and the counterparty banks on August 16, 2021.

This agreement is subject to the following financial covenant:

• From the end of March 2025, ATC Tires AP Private Ltd. must not record a negative net worth on the balance sheet.

#### Note.

The summary of the terms for issuing bonds is as follows:

		_	Millions	of Yen	Thousands of U.S. Dollars			
Company name	Trading name	Issuance date	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	Interest rate	Collateral	Maturity date
The Company	Eleventh series of unsecured bonds	October 30, 2015	¥ —	¥ 11,993	\$ —	0.381	Unsecured	October 28, 2022
The Company	Thirteenth series of unsecured bonds	December 9, 2016	8,994	8,988	67,779	0.250	Unsecured	December 8, 2023
The Company	Fourteenth series of unsecured bonds	July 27, 2020	9,959	9,954	75,049	0.360	Unsecured	July 26, 2030
The Company	Fifteenth series of unsecured bonds	June 6, 2022	16,928	_	127,568	0.490	Unsecured	June 6, 2029
The Company	Sixteenth series of unsecured bonds	June 6, 2022	12,937	_	97,489	0.580	Unsecured	June 4, 2032
Total	_	_	¥ 48,818	¥ 30,935	\$ 367,884	_	_	

#### 2. Assets Pledged as Collateral and Corresponding Liabilities Were as Follows:

# (1) Assets Pledged as Collateral

	Millions of Yen		Thousands of U.S. Dollars
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Cash and cash equivalents	¥ 6,289	¥ 4,880	\$ 47,393
Trade and other receivables	3,515	2,434	26,488
Inventories	2,959	2,854	22,298
Other current assets	296	2,073	2,231
Property, plant and equipment	441	448	3,323
Total	¥ 13,500	¥ 12,689	\$ 101,733

(Note) The above assets are pledged as collateral mainly to secure borrowings under a commitment line agreement.

# (2) Liabilities Corresponding to Assets Pledged as Collateral

	Millions o	Millions of Yen	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Short-term borrowings	¥ 100	¥ 100	\$ 754
Total	¥ 100	¥ 100	\$ 754

#### 19. OTHER FINANCIAL LIABILITIES

The breakdown of other financial liabilities is as follows:

	Millions of Yen		Thousands of U.S. Dollars
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Non-derivative financial liabilities measured			
at amortized cost			
Lease liabilities	¥ 41,578	¥ 40,588	\$ 313,325
Others	18,978	18,777	143,017
Derivative liabilities	815	230	6,139
Total	61,371	59,595	462,480
Current liabilities	24,470	22,428	184,402
Non-current liabilities	36,901	37,168	278,078
Total	¥ 61,371	¥ 59,595	\$ 462,480

Derivative liabilities are classified as financial liabilities measured at fair value through profit or loss (except those to which hedge accounting is applied).

# Data Section

#### **Financial Section**

#### **20. EMPLOYEE BENEFITS**

#### 1. Outline of Defined Benefit Plans

The Company, its domestic consolidated subsidiaries, and some of its overseas consolidated subsidiaries have adopted defined retirement benefit plans to cover employee retirement benefits.

In addition to the above plans, the Company and some of its consolidated subsidiaries have defined contribution pension plans

The Group has mainly adopted lump-sum retirement benefit plans as defined retirement benefit plans. Under lump-sum retirement benefit plans, the source of funds is not saved externally but lump-sum benefits are paid to employees when they retire or voluntarily resign. Lump-sum retirement benefits are paid based on retirement benefit regulations under the Work Rules. Moreover, the Group has established a retirement benefit trust for the payment of lump-sum retirement benefits.

Some of the consolidated subsidiaries in the US have adopted post-retirement medical benefit plans. Post-retirement medical benefit plans are included in liabilities for retirement benefits as they have similar features to those of post-retirement benefits.

#### 2. Defined Benefit Plans

(1) Breakdown of Liabilities or Assets for Retirement Benefits

Reconciliation of defined benefit obligations and plan assets, and liabilities or assets for retirement benefits in the consolidated statement of financial position is as follows:

	Millions of Yen		U.S. Dollars	
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)	
Defined benefit obligations	¥ 65,836	¥ 71,415	\$ 496,128	
Plan assets	(55,849)	(61,760)	(420,869)	
Net liabilities (assets) for retirement benefits presented				
in the consolidated statement of financial position	9,987	9,655	75,259	
Amounts presented in the consolidated statement				
of financial position				
Liabilities for retirement benefits	15,584	16,600	117,441	
Assets for retirement benefits	5,598	6,946	42,182	

Assets for retirement benefits are included in "Other non-current assets" in the consolidated statement of financial position.

# (2) Defined Benefit Obligations

Changes in defined benefit obligations were as follows:

	Millions of	Yen
	Defined benefit plans	Post-retirement medical benefits
At January 1, 2021	¥ 62,526	¥ 7,236
Current service cost	2,949	141
Interest cost	707	118
Changes through remeasurements		
Actuarial losses (gains) arising from changes in demographic		
assumptions	(50)	33
Actuarial losses (gains) arising from changes in financial assumptions	(1,473)	(384)
Actuarial losses (gains) arising from other factors	478	77
Benefits paid	(2,851)	(420)
Past service cost (gains)	· _ ·	· —
Exchange differences on translating foreign operations, etc.	3,100	798
Transfer of discontinued operations	(1,570)	
At December 31, 2021	¥ 63,816	¥ 7,599
Current service cost	3,442	204
Interest cost	902	192
Changes through remeasurements		
Actuarial losses (gains) arising from changes in demographic		
assumptions	(3)	78
Actuarial losses (gains) arising from changes in financial assumptions	(9,765)	(2,037)
Actuarial losses (gains) arising from other factors	279	448
Benefits paid	(3,341)	(513)
Past service cost (gains)	_	_
Exchange differences on translating foreign operations, etc.	3,376	1,160
Transfer of discontinued operations		<u> </u>
At December 31, 2022	¥ 58,706	¥ 7,130

	Thousands of U.S. Dollars	
	Defined benefit plans	Post-retirement medical benefits
At December 31, 2021	\$ 480,904	\$ 57,262
Current service cost	25,939	1,534
Interest cost	6,796	1,446
Changes through remeasurements		
Actuarial losses (gains) arising from changes in demographic		
assumptions	(19)	585
Actuarial losses (gains) arising from changes in financial assumptions	(73,586)	(15,353)
Actuarial losses (gains) arising from other factors	2,100	3,376
Benefits paid	(25,178)	(3,862)
Past service cost (gains)	_	_
Exchange differences on translating foreign operations, etc.	25,443	8,742
Transfer of discontinued operations	_	<u> </u>
At December 31, 2022	\$ 442,398	\$ 53,730

The weighted-average duration of defined benefit obligations was as follows:

	Year	Years		
	2022 (December 31, 2022)	2021 (December 31, 2021)		
Weighted-average duration	10.7	12.0		

#### (3) Plan Assets

Changes in plan assets were as follows:

	Millions of	Yen
	Defined benefit plans	Post-retirement medical benefits
At January 1, 2021	¥ 52,930	¥ —
Interest income	623	_
Changes through remeasurements		
Return on plan assets (excluding interest income)	5,907	_
Contributions from employer	727	_
Benefits paid	(951)	_
Exchange differences on translating foreign operations, etc.	2,523	<u> </u>
At December 31, 2021	¥ 61,760	¥ —
Interest income	897	_
Changes through remeasurements		
Return on plan assets (excluding interest income)	(10,106)	_
Contributions from employer	791	_
Benefits paid	(1,263)	_
Exchange differences on translating foreign operations, etc.	3,770	<u> </u>
At December 31, 2022	¥ 55,849	¥ —

	Thousands of U.	S. Dollars
	Defined benefit plans	Post-retirement medical benefits
At December 31, 2021	\$ 465,411	\$ —
Interest income	6,763	_
Changes through remeasurements		
Return on plan assets (excluding interest income)	(76,161)	_
Contributions from employer	5,962	_
Benefits paid	(9,520)	_
Exchange differences on translating foreign operations, etc.	28,413	_
At December 31, 2022	\$ 420,869	<u> </u>

The asset management policies relating to domestic and overseas plans of the Company and its consolidated subsidiaries have been prepared in order to optimize total return from a medium- and long-term perspective under risks accepted to secure future benefits for employees.

The Group will contribute ¥1,322 million (\$9,960 thousand) to defined benefit plans in the fiscal year ending December 31, 2023.

#### (4) Major Components of Plan Assets

The major components of total plan assets are as follows:

	Millions of Yen					Thou	sands of U.S. Do	ollars	
		<b>2022</b> 2021 (December 31, 2022) (December 31, 2021)					(Decemb	<b>2022</b> er 31, 2022)	
	With quoted prices in active markets	Without quoted prices in active markets	Total	With quoted prices in active markets	Without quoted prices in active markets	Total	With quoted prices in active markets	Without quoted prices in active markets	Total
Cash and deposits	¥ 3,496	¥ —	¥ 3,496	¥ 2,198	¥ —	¥ 2,198	\$ 26,342	\$ <b>—</b>	\$ 26,342
Equity financial instruments									
Domestic equity securities	30,698	_	30,698	34,354	_	34,354	231,331	_	231,331
Foreign equity securities	3,150	_	3,150	3,664	_	3,664	23,737	_	23,737
Debt instruments									
Foreign bonds	16,953	_	16,953	19,416	_	19,416	127,753	_	127,753
Others	1,098	456	1,553	1,693	435	2,128	8,271	3,435	11,706
Total	¥ 55,393	¥ 456	¥ 55,849	¥ 61,325	¥ 435	¥ 61,760	\$ 417,434	\$ 3,435	\$ 420,869

#### (5) Items Related to Actuarial Assumptions

Major actuarial assumptions were as follows:

	2022	2021
	(December 31, 2022)	(December 31, 2021)
Discount rate (weighted-average)	2.6 %	1.4 %

In addition to the above item, actuarial assumptions include expected salary increase rates, mortality rates, and expected retirement rates.

#### Note:

The sensitivity of defined benefit obligations for each fiscal year against changes in major assumptions is as follows. It assumes that the other variables are constant, but in reality, the assumptions do not always change independently. Negative figures represent decreases in defined benefit obligations, and positive figures represent increases in defined benefit obligations.

		Millions	of Yen	Thousands of U.S. Dollars
		2022	2021	2022
	Changes in assumptions	(December 31, 2022)	(December 31, 2021)	(December 31, 2022)
Discount rate	0.5% increase	¥ (3,295)	¥ (4,009)	\$ (24,831)
	0.5% decrease	3.463	4 276	26.096

#### 3. Defined Contribution Pension Plans

Contributions to defined contribution pension plans for the fiscal years ended December 31, 2021 and 2022 were ¥1,677 million and ¥1,854 million (\$13,971 thousand), respectively.

#### 4. Employee Benefit Expenses

Employee benefit expenses included in the consolidated statement of profit or loss for the fiscal years ended December 31, 2021 and 2022 were ¥149,991 million and ¥168,714 million (\$1,271,391 thousand), respectively.

They are recorded mainly in "Cost of sales" and "Selling, general, and administrative expenses."

#### 21. EQUITY AND OTHER EQUITY ITEMS

#### 1. Share Capital

#### (1) Number of Authorized Shares

The number of authorized shares of common stock as of December 31, 2021 and 2022 was 400,000,000.

#### (2) Number of Issued Shares (Fully Paid-in)

Changes in the number of issued shares were as follows:

	Thousands of Shares	Millions of	f Yen
	Number of issued shares	Share capital	Share premium
January 1, 2021	169,549	¥ 38,909	¥ 31,052
Changes	<del>_</del>	_	208
2021 (December 31, 2021)	169,549	38,909	31,261
Changes	<del>_</del>	_	47
2022 (December 31, 2022)	169.549	¥ 38.909	¥ 31.308

	Thousands of Shares	Thousands of U	.S. Dollars
	Number of issued shares	Share capital	Share premium
2021 (December 31, 2021)	169,549	\$ 293,211	\$ 235,575
Changes	<del>_</del>	<del></del>	353
2022 (December 31, 2022)	169,549	\$ 293,211	\$ 235,928

All shares issued by the Company are no-par common stock without any limitation on the rights.

#### 2. Treasury Shares

Changes in the number of treasury shares were as follows:

	Thousands of Shares	Millions of Yen	
	Number of shares	Amount	
January 1, 2021	8,992	¥ 11,834	
Changes	(58)	(76)	
2021 (December 31, 2021)	8,934	11,758	
Changes	(83)	(108)	
2022 (December 31, 2022)	8,851	¥ 11,650	

	Thousands of Shares	Thousands of U.S. Dollars
	Number of shares	Amount
2021 (December 31, 2021)	8,934	\$ 88,608
Changes	(83)	(815)
2022 (December 31, 2022)	8,851	\$ 87,793

The number of treasury shares decreased in the fiscal years ended December 31, 2021 and 2022 due to disposal associated with payment of restricted stock compensation.

### 3. Share Premium and Retained Earnings

#### (1) Share Premium

The Companies Act of Japan prescribes that at least one-half of the payment or delivery relating to the issuance of equity financial instruments must be incorporated into share capital and the remaining amount must be incorporated into legal capital surplus.

In addition, legal capital surplus may be incorporated into share capital by resolution of a general meeting of shareholders.

#### (2) Retained Earnings

Retained earnings consist of legal retained earnings and other surpluses.

The Companies Act prescribes that one-tenth of the amount to be distributed as dividends from retained earnings must be set aside as legal capital surplus or legal retained earnings until the total amount of legal capital surplus or legal retained earnings reaches one-fourth of share capital. In addition, legal retained earnings may be reversed by resolution of a general meeting of shareholders.

#### **22. DIVIDENDS**

#### 1. Dividends Paid

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

Resolution	Class of stock	Total dividends (Millions of Yen)	Dividends per share (Yen)	Record date	Effective date
March 30, 2021 General Meeting of Shareholders	Common stock	¥ 5,138	¥ 32	December 31, 2020	March 31, 2021
August 11, 2021 Board of Directors meeting	Common stock	¥ 5,140	¥ 32	June 30, 2021	August 31, 2021

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

Resolution	Class of stock	Total dividends (Millions of Yen)	Dividends per share (Yen)	Record date	Effective date
March 30, 2022 General Meeting of Shareholders	Common stock	¥ 5,300	¥ 33	December 31, 2021	March 31, 2022
August 10, 2022 Board of Directors meeting	Common stock	¥ 5,303	¥ 33	June 30, 2022	August 31, 2022
		Total dividends	Dividends per		
Resolution	Class of stock	(Thousands of U.S. Dollars)	share (U.S. Dollars)	Record date	Effective date
March 30, 2022 General Meeting of Shareholders	Common stock	\$ 39,942	\$ 0.25	December 31, 2021	March 31, 2022
August 10, 2022 Board of Directors meeting	Common stock	\$ 39,963	\$ 0.25	June 30, 2022	August 31, 2022

#### 2. Dividend Plans for Common Stock

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

Resolution	Class of stock	Source of dividends	Total dividends (Millions of Yen)	Dividends per share (Yen)	Record date	Effective date
March 30, 2022 General Meeting of Shareholders	Common stock	Retained earnings	¥ 5,300	¥ 33	December 31, 2021	March 31, 2022

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

Resolution	Class of stock	Source of dividends	Total dividends (Millions of Yen)	Dividends per share (Yen)	Record date	Effective date
March 30, 2023 General Meeting of Shareholders	Common stock	Retained earnings	¥ 5,303	¥ 33	December 31, 2022	March 31, 2023
		Source of	Total dividends (Thousands of	Dividends per share		
Resolution	Class of stock	dividends	U.S. Dollars)	(U.S. Dollars)	Record date	Effective date
March 30, 2023 General Meeting of Shareholders	Common stock	Retained earnings	\$ 39,963	\$ 0.25	December 31, 2022	March 31, 2023

#### 23. SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES

The breakdown of selling, general, and administrative expenses is as follows:

	Millions	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
Employee benefit expenses	¥ 65,569	¥ 58,598	\$ 494,117
Freightage and warehousing expenses	90,424	51,966	681,419
Advertising and promotion expenses	11,496	9,629	86,633
Others	50,095	41,276	377,504
Total	¥ 217.585	¥ 161.469	\$ 1.639.673

#### **24. OTHER INCOME**

The breakdown of other income is as follows:

	Millions	Millions of Yen		
	2022	<b>2022</b> 2021		
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)	(From January 1, 2022 to December 31, 2022)	
Gain on sale of non-current assets (Note 1)	¥ 545	¥ 20,926	\$ 4,104	
Others (Note 2)	1,721	3,937	12,971	
Total	¥ 2,266	¥ 24,863	\$ 17,076	

#### Notes:

1. The main factor of "Gain on sale of non-current assets" for the fiscal year ended December 31, 2021 is as follows: In an effort to ensure effective utilization of management resources and financial flexibility, and in line with a review of the traditional workstyle that assumed in-office work, the Company transferred a part of its non-current assets (the site in Minato-ku, Tokyo for the Yokohama Rubber Building) by way of a sale and leaseback transaction in the first quarter of the fiscal year ended December 31, 2021. The gain arising from this transfer amounted to ¥20,788 million, and the Company received payment of ¥21,022 million during the period.

The Company considers using this proceeds to invest in business growth. In addition, the Company entered into a leaseback agreement with the transferee to continue to use the building as its office. The contract period ends on March 31, 2023.

2. The amount of "Others" for the fiscal year ended December 31, 2021 includes insurance claim income in connection with the fire loss that occurred at our consolidated subsidiary Yokohama Tire Philippines, Inc. on May 14, 2017.

#### **25. OTHER EXPENSES**

The breakdown of other expenses is as follows:

	Millions	Millions of Yen		
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Loss on sale and retirement of non-current assets	¥ 622	¥ 863	\$ 4,689	
Impairment losses	285	93	2,150	
Others (Note)	2,597	2,432	19,568	
Total	¥ 3,504	¥ 3,389	\$ 26,406	

#### Note:

During the fiscal year ended December 31, 2022, there was a slowdown in operations at some of the overseas manufacturing subsidiaries of the Group due to the impact of the situation in Ukraine. The amount of "Others" includes fixed manufacturing costs of ¥807 million (\$6,081 thousand) incurred as a result of the slowdown.

# **26. FINANCE INCOME AND FINANCE COSTS**

# 1. The Breakdown of Finance Income Is as Follows:

	Millions	s of Yen	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Interest income				
Financial assets measured at amortized cost	¥ 1,070	¥ 477	\$ 8,067	
Dividend income				
Equity financial assets measured at				
fair value through other comprehensive income	3,950	2,683	29,767	
Foreign exchange gains	_	_	_	
Gain on valuation of derivatives	5,305	4,726	39,976	
Others	16	3	121	
Total	¥ 10,341	¥ 7,889	\$ 77,931	

#### 2. The Breakdown of Finance Costs Is as Follows:

	Millions	s of Yen	Thousands of U.S. Dollars
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
Interest expenses			
Financial liabilities measured at amortized cost	¥ 2,939	¥ 2,100	\$ 22,150
Foreign exchange losses	3,726	3,850	28,080
Loss on valuation of derivatives	_	_	_
Others	905	377	6,822
Total	¥ 7,571	¥ 6,327	\$ 57,051



# **27. OTHER COMPREHENSIVE INCOME**

The breakdown of amounts recognized in other comprehensive income, amounts reclassified to profit or loss, and tax effects are as follows.

	Millions	s of Yen	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Exchange differences on translating				
foreign operations				
Amount recognized	¥ 56,358	¥ 38,108	\$ 424,700	
Before tax effects	56,358	38,108	424,700	
Exchange differences on translating				
foreign operations	56,358	38,108	424,700	
Cash flow hedges				
Amount recognized	3,969	4,630	29,909	
Amount reclassified	(5,522)	(546)	(41,610)	
Before tax effects	(1,553)	4,084	(11,701)	
Tax effects	300	(1,007)	2,261	
Cash flow hedges	(1,253)	3,077	(9,440)	
Gains (losses) on financial assets measured at				
fair value through other comprehensive income				
Amount recognized	(3,273)	12,394	(24,662)	
Before tax effects	(3,273)	12,394	(24,662)	
Tax effects	992	(3,755)	7,473	
Gains (losses) on financial assets measured at				
fair value through other comprehensive income	(2,281)	8,639	(17,189)	
Remeasurements of defined benefit plans				
Amount recognized	894	7,226	6,736	
Before tax effects	894	7,226	6,736	
Tax effects	237	(1,851)	1,784	
Remeasurements of defined benefit plans	1,131	5,375	8,520	
Total				
Amount recognized	57,948	62,359	436,683	
Amount reclassified	(5,522)		(41,610)	
Before tax effects	52,426	61,812	395,073	
Tax effects	1,529	(6,613)	11,519	
Other comprehensive income	¥ 53,955	¥ 55,199	\$ 406,592	

#### 28. EARNINGS PER SHARE

2022	0004	
January 1, 2022 to	(From January 1, 2021 to	<b>2022</b> (From January 1, 2022 to December 31, 2022)
¥ 45,918	¥ 65,500	\$ 346,028
45,918	58,749	346,028
¥ —	¥ 6,751	\$ <u> </u>
	¥ 45,918	Example 2       December 31, 2021)         ¥ 45,918       ¥ 65,500         45,918       58,749

	Thousands of shares		
	<b>2022</b> 20		
	(From January 1, 2022 to		
	December 31, 2022)	December 31, 2021)	
Weighted-average number of common stock	160,339	160,353	
Share-based payment	327	240	
Weighted-average number of diluted common stock	160,666	160,593	

	Y	Yen		
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Basic earnings per share				
Continuing operations	¥ 286.38	¥ 366.37	\$ 2.16	
Discontinued operations	_	42.10	_	
Diluted earnings per share				
Continuing operations	285.80	365.82	2.15	
Discontinued operations	¥ —	¥ 42.04	\$ <b>—</b>	

#### 29. SHARE-BASED PAYMENT

# 1. Outline of Stock Compensation Plan

The Group has introduced a restricted stock compensation plan for the members of the Board and officers excluding outside members (hereinafter the "Directors, etc.") to share with other shareholders the merits and risks of share price fluctuations, thereby further increasing their incentive to raise the stock price and enhance corporate value. This plan provides for the payment of monetary compensation receivables required for the allotment of restricted shares as compensation to the Directors, etc. and each of the Directors, etc. will then make an in-kind investment of all such monetary compensation receivables in return for the receipt of said shares.

The Company will conclude a restricted share allotment agreement with the Directors, etc. Directors, etc. to whom restricted shares have been allotted may not transfer the shares to third parties, establish a pledge or a security interest on the shares, use them as an inter vivos gift, bequest them to another party or otherwise dispose of the allotted shares (hereinafter the "Transfer Restrictions") for a period of between five and 30 years, as specified by the Company's Board of Directors (hereinafter the "Transfer Restriction Period"). The Transfer Restrictions are removed on the transfer of all shares allotted to Directors, etc. upon conclusion of the Transfer Restriction Period if the holder of the shares has been a member of the Board, an officer or an employee of the Company continuously from the initial day of the Transfer Restriction Period until the day of the first subsequent Ordinary General Meeting of Shareholders. On the other hand, the Company may reacquire the allotted shares free of charge in cases where the Transfer Restrictions have not been removed at the expiration of the Transfer Restriction Period.

# 2. Number of Shares Granted during the Year and Fair Value

	Yen (unless otherwise stated)		U.S. Dollars (unless otherwise stated)
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
Grant date	May 27, 2022	May 28, 2021	May 27, 2022
Number of shares granted (Shares)	83,649	59,200	83,649
Fair value at grant date	¥ 1,638	¥ 2,078	\$ 12.34



#### 3. Expenses related to Share-based Payments

Expenses related to share-based payments were ¥129 million and ¥134 million (\$1,006 thousand) for the fiscal years ended December 31, 2021 and 2022, respectively, which were included in "Selling, general, and administrative expenses" and "Cost of sales" in the consolidated statement of profit or loss.

#### 30. SUPPLEMENTARY INFORMATION ON THE CONSOLIDATED STATEMENT OF CASH FLOWS

#### 1. Reconciliation of Financing Activity Items

Changes in liabilities arising from financing activities were as follows:

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021)

			Millions	of Yen		
	Balance at	Balance at		Non-cash changes		
	January 1, 2021	Cash flows	Acquisition	New leases	Others	December 31, 2021
Short-term borrowings	¥ 52,916	¥ (2,163)	¥ —	¥ —	¥ (38)	¥ 50,714
Long-term borrowings	114,000	(24,930)	_	_	6,515	95,585
Bonds	40,909	(10,000)	_	_	26	30,935
Lease liabilities	32,515	(7,261)	_	13,540	1,794	40,588
Financial liabilities	¥ 240,340	¥ (44,354)	¥ —	¥ 13,540	¥ 8,297	¥ 217,823

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022)

	of Yen						
	Balance at	Balance at January 1, 2022 Cash flows Acq		lon-cash changes		Balance at  December 31,	
				New leases	2022		
Short-term borrowings	¥ 50,714	¥ 34,460	¥ —	¥ —	¥ 701	¥ 85,875	
Long-term borrowings	95,585	(5,971)	_	_	7,393	97,008	
Commercial papers	_	7,000	_	_	_	7,000	
Bonds	30,935	18,000	_	_	(117)	48,818	
Lease liabilities	40,588	(6,609)	_	6,299	1,299	41,578	
Financial liabilities	¥ 217,823	¥ 46,881	¥ —	¥ 6,299	¥ 9,277	¥ 280,279	

	Thousands of U.S. Dollars								
	Balance at	_	N	lon-cash changes		Balance at December 31,			
	January 1, 2022	Cash flows	Acquisition	New leases	Others	2022			
Short-term borrowings	\$ 382,172	\$ 259,680	\$ —	\$ —	\$ 5,283	\$ 647,135			
Long-term borrowings	720,312	(44,993)	_	_	55,712	731,031			
Commercial papers	_	52,751	_	_	_	52,751			
Bonds	233,119	135,644	_	_	(879)	367,884			
Lease liabilities	305,865	(49,801)	_	47,468	9,792	313,325			
Financial liabilities	\$ 1,641,468	\$ 353,282	\$ —	\$ 47,468	\$ 69,908	\$ 2,112,126			

### **31. FINANCIAL INSTRUMENTS**

#### 1. Capital Management

In order to realize the Group's sustainable growth and enhancement of corporate value, the Group's capital management aims to improve capital efficiency to secure sufficient capital for the growth of its core business.

The Group monitors, as indicators related to capital management, debt to equity ratio (D/E ratio) and return on equity (ROE) attributable to owners of the parent.

### 2. Basic Policies on Financial Risk Management

The Group is exposed to financial risks in the course of conducting business activities. To avoid or reduce such risks, the Group practices risk management based on prescribed policies.

The Group conducts derivative transactions only for actual demand and not for speculative purposes.

#### 3. Credit Risk

#### (1) Credit Risk Management and Maximum Exposure to Credit Risk

Trade receivables such as notes and accounts receivables held by the Group are exposed to customer credit risk. For such credit risk, the Group monitors creditworthiness of main counterparties on a regular basis and manages due dates and outstanding balances of each counterparty. In addition, efforts are made to promptly identify and reduce the risk of uncollectibility due to deterioration of financial position of counterparties or other reasons. The Group's consolidated subsidiaries also manage credit risk in accordance with the internal policies for managing receivables.

The Group is not exposed to credit risk that is significantly concentrated on any particular counterparty. The maximum exposure to the credit risk of financial assets is the carrying amount after impairment of the financial assets presented in the consolidated statement of financial position.

#### (2) Credit Risk Management Practices

The Group recognizes allowance for doubtful receivables on financial assets classified as measured at amortized cost. In recognizing and measuring the allowance for doubtful receivables, the Group categorizes financial assets into three stages based on whether there has been a significant increase in the credit risk and whether the financial asset has been credit impaired.

- Stage 1: There is no indication of a significant increase in credit risk.
- Stage 2: There is an indication of a significant increase in credit risk, but no indication of credit impairment.
- Stage 3: A significant increase in credit risk and credit impairment are both apparent.

A significant increase in credit risk refers to a significant increase in the risk of default occurring at the end of the fiscal year compared to the initial recognition. The Group determines whether there is a significant increase in credit risk mainly based on the principal and interest payment in arrears for over 30 days, in light of the economic conditions of the industry to which the debtor belongs and the possibility of future changes in debtor's solvency.

The Group determines that a default has been triggered when events occur, such as significant financial difficulties of the debtor or issuer and the principal and interest payment in arrears.

If it is determined that the default is occurring, an objective evidence of credit impairment is considered to exist, and such financial assets are classified as credit-impaired financial assets.

Irrespective of the above three stages, when it is reasonably determined that all or part of a financial asset is not collectable, such as in the case of financial assets legally being extinguished, the carrying amount of the financial asset is directly written off.

In estimating allowance for doubtful receivables, expected credit losses of trade receivables are measured on a collective basis, and each group company individually sets its own grouping or sub-grouping of credit losses.

In measuring the 12-month and lifetime expected credit losses, the Group uses reasonable and supportable information that is available without undue cost or effort at the end of the fiscal year about past events, current conditions and forecasts of future economic conditions.

In measuring the expected credit losses on a collective basis, the actual rate of default from the past experiences may be used.

(3) Changes in Allowance for Doubtful Receivables Changes in allowance for doubtful receivables are as follows:

				Millions	s of Yen			
		(From January	1, 2022 to Decer	<b>2022</b> mber 31, 2022)		(From January	1, 2021 to Decei	2021 mber 31, 2021)
	Allowance for doubtful receivables for financial instruments other than trade and other receivables (12-month expected credit loss)	Allowance for doubtful receivables for trade and other receivables (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments for which credit risk has increased significantly (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments that are credit-impaired (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments other than trade and other receivables (12-month expected credit loss)	Allowance for doubtful receivables for trade and other receivables (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments for which credit risk has increased significantly (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments that are credit-impaired (Lifetime expected credit loss)
Beginning balance	¥ —	¥ 1,046	¥ 649	¥ 1,573	¥ —	¥ 1,542	¥ 610	¥ 1,475
Provision (Note)	_	558	28	_	_	575	40	1
Utilization through write-off	_	(105)	_	(1)	_	(1,148)	_	_
Reversal (Note)	_	(236)	(41)	(13)	_	(56)	(32)	(33)
Other	_	82	384	(266)	_	133	31	130
Ending balance	¥ —	¥ 1,345	¥ 1,020	¥ 1,293	¥ —	¥ 1,046	¥ 649	¥ 1,573

	Thousands of U.S. Dollars				
		(From January	1, 2022 to Decer	<b>2022</b> mber 31, 2022)	
	Allowance for doubtful receivables for financial instruments other than trade and other receivables (12-month expected credit loss)	Allowance for doubtful receivables for trade and other receivables (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments for which credit risk has increased significantly (Lifetime expected credit loss)	Allowance for doubtful receivables for financial instruments that are creditimpaired (Lifetime expected credit loss)	
Beginning balance	\$ <b>—</b>	\$ 7,882	\$ 4,891	\$ 11,854	
Provision (Note)	_	4,205	211	_	
Utilization through write-off	_	(791)	_	(8)	
Reversal (Note)	_	(1,778)	(309)	(98)	
Other	_	618	2,894	(2,005)	
Ending balance	\$ <i>—</i>	\$ 10,136	\$ 7,687	\$ 9,744	

#### Note:

Provision and reversal of allowance for doubtful receivables for trade and other receivables (lifetime expected credit loss) are due to an increase or decrease in trade and other receivables mainly as a result of sale and collection of those assets.

#### (4) Carrying Amount of Financial Instruments related to Allowance for Doubtful Receivables The carrying amount (before allowance for doubtful receivables) of financial instruments related to allowance for doubtful receivables is as follows:

	Millions	Millions of Yen			
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)		
Financial instruments other than trade and other receivables (12-month expected credit loss)	¥ 4,006	¥ 6,509	\$ 30,185		
Trade and other receivables (Lifetime expected credit loss)	196,065	171,886	1,477,507		
Financial instruments for which credit risk has increased significantly (Lifetime expected credit loss)	290	305	2,187		
Credit-impaired financial instruments (Lifetime expected credit loss)	1,095	990	8,255		

### (5) Analysis of Credit Risk

Below is the aged analysis of trade and other receivables.

	Millions o	Millions of Yen			
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)		
30 days or less past due	¥ 12,370	¥ 7,929	\$ 93,218		
Over 30 days to 60 days or less past due	2,943	2,082	22,178		
Over 60 days to 90 days or less past due	1,020	1,066	7,687		
Over 90 days past due	7,105	3,854	53,542		
Total	¥ 23,438	¥ 14,932	\$ 176,624		

With regard to financial instruments related to allowance for doubtful receivables other than trade and other receivables, there is no concentration of credit risk on any particular rating.

#### 4. Liquidity Risk

# (1) Liquidity Risk Management

The Group raises funds mainly through borrowings from banks and issuance of bonds. Therefore, the Group is exposed to liquidity risk, where the deterioration in the financing environment and other reasons may hinder the Group from fulfilling its obligations to make payments by the due date.

To manage liquidity risk within the Group, the Company's finance department creates and updates cash plans as necessary, based on information obtained from the departments and major consolidated subsidiaries of the Company. At the same time, the Company constantly monitors the operating environment to maintain and ensure appropriate liquidity in hand in response to changing conditions.

(2) Balance of Financial Liabilities (including Derivative Financial Instruments) by Settlement Date
The balance of financial liabilities (including derivative financial instruments) by settlement date is as follows:
Fiscal Year Ended December 31, 2021 (December 31, 2021)

		Millions of Yen						
	Carrying amount	Contractual cash flows	1 year or less	Over 1 year through 2 years	Over 2 years through 3 years	Over 3 years through 4 years	Over 4 years through 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	¥ 71,945	¥ 71,945	¥ 71,945	¥ —	¥ —	¥ —	¥ —	¥ —
Bonds and borrowings	177,235	179,036	82,253	23,826	16,263	16,692	21,447	18,555
Lease liabilities	40,588	46,087	8,391	5,595	4,865	3,709	2,899	20,628
Subtotal	289,768	297,068	162,588	29,421	21,128	20,401	24,346	39,183
Derivative financial liabilities	230	230	169	29	32	_	_	_
Total	¥ 289,997	¥ 297,297	¥ 162,757	¥ 29,450	¥ 21,161	¥ 20,401	¥ 24,346	¥ 39,183

Fiscal Year Ended December 31, 2022 (December 31, 2022)

Fiscal Year Ended December	per 31, 202	2 (Decembe	er 31, 2022)	)				
	Millions of Yen							
	Carrying amount	Contractual cash flows	1 year or less	Over 1 year through 2 years	Over 2 years through 3 years	Over 3 years through 4 years	Over 4 years through 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	¥ 78,131	¥ 78,131	¥ 78,131	¥ —	¥ —	¥ —	¥ —	¥ —
Bonds and borrowings	238,701	245,826	118,997	19,081	19,695	27,038	8,839	52,176
Lease liabilities	41,578	46,779	9,104	7,052	5,396	4,105	3,786	17,335
Subtotal	358,410	370,736	206,232	26,133	25,092	31,143	12,625	69,511
Derivative financial liabilities	815	815	764	51	_	_	_	_
Total	¥ 359,224	¥ 371,550	¥ 206,995	¥ 26,184	¥ 25,092	¥ 31,143	¥ 12,625	¥ 69,511
				Thousands of	U.S. Dollars			
	Carrying amount	Contractual cash flows	1 year or less	Over 1 year through 2 years	Over 2 years through 3 years	Over 3 years through 4 years	Over 4 years through 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	\$ 588,777	\$ 588,777	\$ 588,777	\$ —	\$ <b>—</b>	\$ <b>—</b>	\$ <b>—</b>	\$ <b>—</b>
Bonds and borrowings	1,798,801	1,852,491	896,737	143,788	148,421	203,753	66,608	393,184
Lease liabilities	313,325	352,520	68,605	53,143	40,667	30,937	28,533	130,634

5,755

\$ 2,707,041 \$ 2,799,926 \$ 1,559,875 \$ 197,314 \$ 189,088 \$ 234,690

384

234,690

\$ 95,141

523,818

\$ 523,818

2,700,903 2,793,787 1,554,119

6,139

6,139

Subtotal

Total

Derivative financial liabilities

#### 5. Foreign Exchange Risk

#### (1) Foreign Exchange Risk Management

The Group operates businesses globally and therefore is involved in foreign currency transactions. Foreign currency receivables and payables arising from those transactions are exposed to foreign exchange fluctuation risk.

The Group's foreign exchange risk arises mainly from the fluctuation of the U.S. Dollar and the Euro. The Company and its certain consolidated subsidiaries assess foreign exchange fluctuation risk of trade receivables and payables denominated in foreign currencies for each currency every month, and hedge part of the risk by using forward foreign exchange contracts.

#### (2) Foreign Exchange Sensitivity Analysis

For financial instruments held by the Group at the end of each fiscal year, the effects of a 1% increase in Japanese yen against the U.S. Dollar and the Euro on profit before tax are as follows. All other variables are assumed to be constant.

		Millions	Millions of Yen		
		2022	2021	2022	
		(From January 1, 2022 to	(From January 1, 2021 to	(From January 1, 2022 to	
	Currency	December 31, 2022)	December 31, 2021)	December 31, 2022)	
Effects on profit before tax	U.S. Dollar	¥ (193)	¥ (74)	\$ (1,453)	
	Euro	(431)	(154)	(3,245)	

#### 6. Interest Rate Risk

#### (1) Interest Rate Risk Management

The Group is exposed to interest rate risk from variable interest rates on some of the interest-bearing liabilities assumed by the Group.

The Group uses interest rate swaps to reduce the risk of fluctuation in the interest rates on borrowings.

#### (2) Interest Rate Sensitivity Analysis

For interest-bearing liabilities with variable interest rates assumed by the Group at the end of each fiscal year, the effects of a 1% increase in the interest rate on profit before tax are as follows. All other variables are assumed to be constant.

	Millions	Thousands of U.S. Dollars	
	2022	2021	2022
	(From January 1, 2022 to	(From January 1, 2021 to	(From January 1, 2022 to
	December 31, 2022)	December 31, 2021)	December 31, 2022)
Effects on profit before tax	¥ (880)	¥ (509)	\$ (6,630)

#### 7. Share Price Fluctuation Risk

#### (1) Share Price Fluctuation Risk Management

The Group holds shares in other listed companies with which the Group has business relationships for certain purposes, such as reinforcing sales foundations. Thus, the Group is exposed to the share price fluctuation risk of equity financial instruments.

For these equity financial instruments, the Group monitors the share prices and financial position of issuers on a regular basis and reviews its shareholdings on an ongoing basis by considering the relationship with the issuer of the equity instruments.

#### (2) Share Price Fluctuation Sensitivity Analysis

For equity financial assets (shares) in active markets held by the Group at the end of each fiscal year, if all quoted prices are assumed to decrease by 1% at the end of the fiscal year, the effects on other comprehensive income (before tax) are as follows:

	Millions	Thousands of U.S. Dollars	
	2022	2022	
	(From January 1, 2022 to	(From January 1, 2021 to	(From January 1, 2022 to
	December 31, 2022)	December 31, 2021)	December 31, 2022)
Effects on other comprehensive income (before tax)	¥ (898)	¥ (1,027)	\$ (6,767)

#### 8. Carrying Amount and Fair Value of Financial Instruments

The carrying amount and fair value of financial instruments are as follows.

Financial assets and financial liabilities other than bonds and long-term borrowings are not included below as their fair value approximates their carrying amount.

		Millions of Yen				Thousands of U.S. Dollars		
	(Decem	<b>2022</b> (December 31, 2022)		2021 (December 31, 2021)		<b>2022</b> nber 31, 2022)		
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value		
Long-term borrowings (Note)	¥ 97,008	¥ 96,186	¥ 95,585	¥ 95,863	\$ 731,031	\$ 724,840		
Bonds (Note)	48,818	46,393	30,935	30,984	367,884	349,610		

#### Note:

The balance due within one year is included.

The fair value of long-term borrowings and bonds is determined by discounting each obligation classified by term using a rate that takes into account time to maturity and credit risk.

The fair value hierarchy of long-term borrowings and bonds is categorized within Level 3.

#### 9. Fair Value Hierarchy of Financial Instruments

Financial instruments measured at fair value on a recurring basis after the initial recognition are categorized into three levels of the fair value hierarchy depending on the observability and significance of inputs used for the fair value measurement.

Each level of fair value hierarchy is defined as follows:

Level 1: Fair values measured at quoted prices in active markets

Level 2: Fair values measured using direct or indirect observable inputs other than those of Level 1

Level 3: Fair values measured using unobservable inputs

When two or more inputs are used for the measurement of fair value, the level of fair value is determined based on the lowest level input that is significant to the entire measurement.

Transfers between the levels of the fair value hierarchy are recognized as if they have occurred at the beginning of each quarterly period.

There were no transfers between Level 1, Level 2 and Level 3 during the fiscal years ended December 31, 2021 and 2022.

Assets measured at fair value on a recurring basis are as follows:

Fiscal Year Ended December 31, 2021 (December 31, 2021)

	Millions of Yen				
	Level 1	Level 2	Level 3	Total	
Financial assets				_	
Non-derivative financial assets measured at					
fair value through profit or loss					
Other	¥ —	¥ 182	¥ —	¥ 182	
Non-derivative financial assets measured at					
fair value through other comprehensive income					
Shares	102,690	_	11,282	113,972	
Other	_	_	596	596	
Derivative assets	_	3,995		3,995	
Total	¥ 102,690	¥ 4,177	¥ 11,879	¥ 118,745	
Financial liabilities					
Derivative liabilities		230		230	
Total	¥ —	¥ 230	¥ —	¥ 230	

Fiscal Year Ended December 31, 2022 (December 31, 2022)

	Millions of Yen							
	Level	1	Level	2	Level	3	Т	otal
Financial assets								
Non-derivative financial assets measured at								
fair value through profit or loss								
Other	¥	_	¥	179	¥	_	¥	179
Non-derivative financial assets measured at								
fair value through other comprehensive income								
Shares	8	9,793		_	13	3,142		102,935
Other		· —		_		610		610
Derivative assets		195	8	3,431		_		8,626
Total	¥ 8	9,988	¥ 8	3,610	¥ 1:	3,752	¥ ′	112,351
Financial liabilities								
Derivative liabilities		_		815				815
Total	¥	_	¥	815	¥	_	¥	815
	Thousands of U.S. Dollars							
	Level	1	Level	2	Level	3	Т	otal
Financial assets								
Non-derivative financial assets measured at								
fair value through profit or loss								
Other	\$	_	\$ 1	1,347	\$	_	\$	1,347
Non-derivative financial assets measured at								
fair value through other comprehensive income								
Shares	67	6,664		_	99	9,035	7	775,699
Other		_		_		4,599		4,599
Derivative assets		1,469	63	3,537		_		65,006
Total	\$ 67	8,133	\$ 64	1,885	\$ 103	3,634	\$ 8	346,652
Financial liabilities								
Derivative liabilities		_	•	5,139		_		6,139
Total	\$	_	\$ 6	5,139	\$	_	\$	6,139

The fair value of shares that have an active market is determined based on market prices, and therefore is categorized within Level 1. When the fair value of shares that do not have an active market is measured at the amount which is determined using significant unobservable inputs through methods including the comparable peer company analysis, it is categorized within Level 3.

Certain derivative assets and derivative liabilities including forward foreign exchange contracts and interest rate swaps are not traded in an active market. Their fair value is determined by making the best use of observable market data to the extent available and does not depend on the Group's own estimation to the extent possible. If all significant inputs are observable, it is categorized within Level 2.

The fair value of non-derivative financial assets categorized within Level 3 is evaluated using price book-value ratio (PBR) under the comparable peer company analysis.

In accordance with the Group's policies and procedures on the valuation of the fair value measurement, the finance department decides the method of evaluating financial instruments under review and measures their fair value.

The results of the fair value measurement are approved by an appropriate person responsible for valuation.

# Data Section

#### **Financial Section**

Changes in financial instruments measured at fair value on a recurring basis that are categorized within Level 3 are as follows:

	Millions of Yen
	Financial assets
Balance at January 1, 2021	¥ 8,562
Total gains and losses	
Other comprehensive income (Note)	3,591
Purchase	35
Sale	(14)
Other	(296)
Balance at December 31, 2021	¥ 11,879
Total gains and losses	
Other comprehensive income (Note)	1,706
Purchase	155
Sale	(1)
Other	14
Balance at December 31, 2022	¥ 13,752

	Thousands of U.S. Dollars
	Financial assets
Balance at December 31, 2021	\$ 89,515
Total gains and losses	
Other comprehensive income (Note)	12,854
Purchase	1,167
Sale	(7)
Other	105
Balance at December 31, 2022	\$ 103,634

#### Note:

Other comprehensive income related to financial assets measured at fair value through other comprehensive income, which is included in "Gains (losses) on financial assets measured at fair value through other comprehensive income."

### 10. Derivative Transactions and Hedging Activities

Cash flow hedges

The Group primarily designates the following as cash flow hedges: forward foreign exchange contracts and option contracts to fix cash flows of forecast transactions denominated in foreign currencies, interest rate swaps to fix variable interest rates on long-term borrowings, and commodity futures transactions to offset price fluctuations of raw material purchase prices.

The amounts recognized in profit or loss for hedge ineffectiveness and the portion excluded from the assessment of hedge effectiveness are not material for the fiscal years ended December 31, 2021 and 2022.

Changes in the fair value of hedging instruments that are used as a basis for the calculation of hedge ineffectiveness are not material for the fiscal years ended December 31, 2021 and 2022.

#### (1) Fair Value of Hedging Instruments under Hedge Accounting

The fair value of hedging instruments under hedge accounting by type of hedge is as follows:

		Millions of Yen				U.S. Dollars
	(Decem	<b>2022</b> (December 31, 2022) (Decem		2021 aber 31, 2021)	(December 31,	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Cash flow hedges						
Interest rate swaps	¥ 848	¥ —	¥ 411	¥ —	\$ 6,388	\$ <b>—</b>
Forward foreign exchange contracts	1,785	707	2,674	123	13,450	5,325
Option contracts	_	6	183	_	_	45
Commodity futures transactions	195	_		_	1,469	_
Subtotal	2,827	713	3,268	123	21,307	5,370
Total	¥ 2,827	¥ 713	¥ 3,268	¥ 123	\$ 21,307	\$ 5,370

In the consolidated statement of financial position, the fair value of assets as hedging instruments is included in "Other financial assets (Current assets)" and "Other financial assets (Non-current assets)," and the fair value of liabilities as hedging instruments is included in "Other financial liabilities (Current liabilities)" and "Other financial liabilities (Non-current liabilities)."

# (2) Notional Amount and Average Price of Hedging Instruments under Hedge Accounting The notional amount and average price of hedging instruments under hedge accounting are as follows:

			Notional –		Millions	of Yen		Thousa U.S. De		
Type of risk	Type of hedge	Hedging instrument	amount and average price	and <b>2022</b> 2021		amount and			(Decem	<b>2022</b> ber 31, 2022)
				Within 1 year	Over 1 year	Within 1 year	Over 1 year	Within 1 year	Over 1 year	
Interest rate risk	Cash flow hedge	Pay fixed, receive variable Interest rate swaps	Notional amount	¥ 9,554	¥ 28,663	¥ 8,281	¥ 33,126	\$ 72,000	\$ 216,000	
		Short EUR Forward foreign	Notional amount	22,352	_	18,207	10,939	168,442	_	
		exchange contracts	Average price (USD/EUR)	1.2	_	1.2	1.2	0.01	_	
		Long INR Forward foreign	Notional amount	12,144	2,117	12,076	_	91,511	15,955	
		exchange contracts	Average price (USD/INR)	82.7	86.1	79.1		0.62	0.65	
		Long THB Forward foreign	Notional amount	14,250	_	11,319	_	107,385	_	
Foreign	Cash flow	exchange contracts	Average price (JPY/THB)	3.9	_	3.4	_	0.03	_	
exchange risk	hedge	Long ILS Forward foreign	Notional amount	11,107	_	_	_	83,700	_	
		exchange contracts	Average price (USD/ILS)	3.4	_	_		0.03	_	
		Short EUR	Notional amount	_	_	8,150	_			
		Call option contracts	Average price (USD/EUR)	_	_	1.2	_	_	_	
		Long ILS	Notional amount	4,034	_	_	_	30,400	_	
		Put option contracts	Average price (USD/ILS)	3.6	_	_	_	0.03	_	
Commodity price	Cash flow	Long Natural rubber Commodity	Notional amount	2,457	_			18,513	_	
fluctuation risk	hedge	futures transactions	Average price (USD/t)	1,230.0		_		9.27		

The interest rate swaps that were entered into to fix variable interest payments against interest rate fluctuation risk bear variable interest of 6-month USD LIBOR, with a fixed payment rate ranging from negative 0.011% to positive 0.010%.

(3) Changes in Other Components of Equity (Changes in Fair Value of Hedging Instruments)(i) Interest rate fluctuation risk

	Millions	Millions of Yen		
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Beginning of the year	¥ 231	¥ 23	\$ 1,738	
Amount recognized	717	506	5,403	
Amount reclassified to profit for the year (Note)	(720)	(298)	(5,424)	
End of the year	228	231	1,718	

#### Note:

The amounts before tax effects are  $\pm$ (288) million and  $\pm$ (851) million (\$(6,416) thousand) for the fiscal years ended December 31, 2021 and 2022, respectively, and are included in "Finance costs" in the consolidated statement of profit or loss.

#### (ii) Foreign exchange fluctuation risk

	Millions	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
Beginning of the year	¥ 2,068	¥ (818)	\$ 15,583
Amount recognized	2,238	3,022	16,866
Amount reclassified to profit for the year (Note)	(3,665)	(137)	(27,620)
End of the year	641	2,068	4,829

#### Note:

The amounts before tax effects are  $\pm$ (194) million and  $\pm$ (4,684) million (\$(35,294) thousand) for the fiscal years ended December 31, 2021 and 2022, respectively, and are included in "Revenue" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

#### (iii) Commodity price fluctuation risk

	Millions	Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)
Beginning of the year	¥ 38	¥ 54	\$ 284
Amount recognized	167	32	1,258
Amount reclassified to profit for the year (Note)	10	(48)	76
End of the year	215	38	1,618

#### Note

The amounts before tax effects are ¥(63) million and ¥13 million (\$101 thousand) for the fiscal years ended December 31, 2021 and 2022, respectively, and are included in "Cost of sales" in the consolidated statement of profit or loss

# **32. BUSINESS COMBINATIONS**

Fiscal Year Ended December 31, 2021 (From January 1, 2021 to December 31, 2021) Not applicable.

Fiscal Year Ended December 31, 2022 (From January 1, 2022 to December 31, 2022) Not applicable.

# **33. SUBSIDIARIES**

# 1. Major Subsidiaries

The Company's major subsidiaries are as follows:

Name	Location	Ownership percentage of voting rights
Yokohama Tire Japan Co., Ltd.	Tokyo, Japan	91.0 %
Ibaraki Yokohama Tire Sales Co., Ltd.	Mito, Japan	45.0
Niigata Yokohama Tire Co., Ltd.	Niigata, Japan	50.0
Kagoshima Yokohama Tire Co., Ltd.	Kagoshima, Japan	50.0
Okinawa Yokohama Tire Co., Ltd.	Haebaru, Japan	40.0
Sasson Yokohama Tire Co., Ltd.	Otaru, Japan	50.0
YFC Co., Ltd.	Hiratsuka, Japan	100.0
Yokohama Tire Retread Co., Ltd.	Onomichi, Japan	100.0
Kameyama Bead Co., Ltd.	Kameyama, Japan	100.0
Aichi Tire Industry Co., Ltd.	Komaki, Japan	100.0
Hamagomu Engineering Co., Ltd.	Hiratsuka, Japan	100.0
Hamagomu Logistics Co., Ltd.	Hiratsuka, Japan	100.0
Yokohama Mold Co., Ltd.	Omitama, Japan	100.0
Yokohama Tire Corporation	California, United States of America	100.0
Yokohama Tire (Canada) Inc.	British Columbia, Canada	100.0
Yokohama Corporation of America	California, United States of America	100.0
Yokohama Corporation of North America	California, United States of America	100.0
Friend Tire Company	Missouri, United States of America	100.0
Yokohama Tire Manufacturing Mississippi, LLC.	Mississippi, United States of America	100.0
Yokohama Tire Manufacturing Virginia LLC.	Virginia, United States of America	100.0
Yokohama Tire Mexico S. De R.L. De C.V.	Guanajuato, Mexico	100.0
Yokohama Tire Australia Pty. Ltd.	New South Wales, Australia	100.0
Yokohama Europe GmbH	Düsseldorf, Germany	100.0
Yokohama (Suisse) S.A.	Payerne, Switzerland	100.0
Yokohama Scandinavia AB	Stockholm, Sweden	100.0
Yokohama Denmark A/S	Copenhagen, Denmark	100.0
Yokohama H.P.T. Ltd.	Milton Keynes, the United Kingdom	100.0
Yokohama Iberia, S.A.	Madrid, Spain	100.0
Yokohama France S.A.S	Genas, France	66.0
	•	
Yokohama CEE Spółka z. o.o.	Warsaw Poland	100.0
Yokohama Tire Sales Philippines, Inc.	Makati City, Philippines	100.0
Yokohama Tire Philippines, Inc.	Clark Freeport Zone, Philippines	100.0
Yokohama Tire Taiwan Co., Ltd.	Taipei, Taiwan	75.0
Hangzhou Yokohama Tire Co., Ltd.	Zhejiang, China	100.0
Suzhou Yokohama Tire Co., Ltd.	Jiangsu, China	100.0
Yokohama Rubber (China) Co., Ltd.	Shanghai, China	100.0
Yokohama Tire Sales (Shanghai) Co., Ltd.	Shanghai, China	100.0
Yokohama Russia L.L.C.	Moscow, Russia	100.0
LC Yokohama R.P.Z.	Lipetsk, Russia	100.0
Yokohama Tire Sales (Thailand) Co., Ltd.	Bangkok, Thailand	100.0
Yokohama Tire Manufacturing (Thailand) Co., Ltd.	Rayong, Thailand	100.0
Yokohama Mold (Thailand) Co., Ltd.	Rayone, Thailand	100.0
Yokohama Tyre Vietnam Inc.	Binh Duong, Vietnam	100.0
Yokohama India Private Ltd.	Haryana, India	100.0
Yokohama Asia Co., Ltd.	Bangkok, Thailand	100.0
Yokohama Tire Korea Co., Ltd.	Seoul, South Korea	100.0
Yokohama Tyre Sales Malaysia Sdn. Bhd.	Selangore, Malaysia	51.0
Yokohama Rubber Singapore Pte. Ltd.	Singapore	100.0
Yokohama Off-Highway Tires K.K.	Tokyo, Japan	100.0

Name	Location	Ownership percentage of voting rights
Alliance Tire Company Ltd.	Haifa, Israel	100.0
ATC Tires Private Ltd.	Maharashtra, India	100.0
Alliance Tire Europe B.V.	North Holland, Netherlands	100.0
Yokohama Off-Highway Tires America Inc.	Massachusetts, United States of America	100.0
ATC Tires AP Private Ltd.	Maharashtra, India	100.0
Yokohama Industrial Products Japan Co., Ltd.	Tokyo, Japan	100.0
Furusawa Shokai Co., Ltd.	Kita-Hiroshima, Japan	100.0
Yokohama Industries Americas Inc.	Kentucky, United States of America	100.0
Yokohama Industries Americas Ohio Inc.	Ohio, United States of America	100.0
Yokohama Industries Americas de Mexico S. de R.L. de C.V.	Aguascalientes, Mexico	100.0
SC Kingflex Corporation	Taoyuan, Taiwan	49.0
Yokohama Rubber (Thailand) Co., Ltd.	Rayong, Thailand	79.8
Shandong Yokohama Rubber Industrial Products Co., Ltd.	Shandong, China	77.0
Yokohama Aerospace America, Inc.	Washington, United States of America	80.0
Yokohama Industrial Products Sales-Shanghai Co., Ltd.	Shanghai, China	100.0
Yokohama Industrial Products Asia-Pacific Pte. Ltd.	Singapore	100.0
Yokohama Industrial Products-Hangzhou Co., Ltd.	Zhejiang, China	100.0
PT Yokohama Industrial Products Manufacturing Indonesia	Batam, Indonesia	100.0
Yokohama Rubber Marine & Aerospace Co., Ltd.	Hiratsuka, Japan	100.0
HAMAGOMU AICOM INC.	Yokohama, Japan	100.0
PRGR Co., Ltd.	Hiratsuka, Japan	100.0
Y.T. Rubber Co., Ltd.	Suratthani, Thailand	95.0

#### 2. Subsidiaries with Material Non-controlling Interests

The Group has no subsidiaries with material non-controlling interests or individually material associates.

#### **34. RELATED PARTIES**

Remunerations for major executives

Remunerations for major executives of the Group were as follows:

	Millions	Millions of Yen		
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	<b>2022</b> (From January 1, 2022 to December 31, 2022)	
Remunerations and bonuses	¥ 404	¥ 397	\$ 3,041	
Performance-linked remuneration	57	58	433	
Share-based payment	110	100	829	
Total	¥ 571	¥ 555	\$ 4,304	

#### **35. COMMITMENTS**

Commitments related to the acquisition of assets at or after the end of each fiscal year are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	<b>2022</b> (December 31, 2022)	2021 (December 31, 2021)	<b>2022</b> (December 31, 2022)
Agreements on the acquisition of property, plant and			_
equipment and intangible assets	¥ 19,722	¥ 19,249	\$ 148,622

#### **36. CONTINGENT LIABILITIES**

In operating their businesses, the Company and its group companies may be subject to investigations by government agencies or may be involved in cases that can develop into disputes in Japan or in overseas jurisdictions.

At December 31, 2022, there are tax investigations conducted by taxation authorities concerning the interpretation and application of taxation systems mainly in emerging economies, notices of reassessment issued, and unresolved claims, including litigation and settlement negotiations. Based on consultation with legal and tax professionals, the Company estimates the likelihood that these contingent liabilities will have significant consequences and recognizes a liability when it is probable that an outflow of resources embodying economic benefits will be required to settle the liability and a reliable estimate can be made of the amount of the liability.

Such liabilities are recorded based on currently available information; however, due to the inherent uncertainty of estimates, additional liabilities may be incurred if new facts become known in the future.

#### **37. DISCONTINUED OPERATIONS**

In the fiscal year ended December 31, 2021, the Company transferred the Hamatite business, which belonged to the MB segment, to Sika AG. As a result, profit and loss related to the business were classified as discontinued operations.

The transfer covered the Hamatite businesses operated by the Company, its wholly owned domestic consolidated subsidiary, Yokohama Industrial Products Japan Co., Ltd., and overseas Group companies, Yokohama Industries Americas Inc. (USA), Yokohama Industrial Products-Hangzhou Co., Ltd. (China), and Yokohama Rubber (Thailand) Co., Ltd. (Thailand).

Profit (loss) from discontinued operations is as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	2022	2021	2022	
	(From January 1, 2022 to December 31, 2022)	(From January 1, 2021 to December 31, 2021)	(From January 1, 2022 to December 31, 2022)	
Revenue (Note)	¥ —	¥ 25,476	\$ <b>—</b>	
Expenses	_	(16,285)	_	
Profit for the year before tax from				
discontinued operations	_	9,191	_	
Income taxes (Note)	_	(2,440)	_	
Profit for the year from discontinued operations	¥ —	¥ 6,751	<b>\$</b> —	

#### Note:

A gain of ¥9,292 million from the transfer of the Hamatite business is included.

The income tax expense related to this gain was ¥2,528 million.

Cash flows from discontinued operations are as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	<b>2022</b> (From January 1, 2022 to December 31, 2022)	2021 (From January 1, 2021 to December 31, 2021)	2022 (From January 1, 2022 to December 31, 2022)	
Cash flows from operating activities	¥ —	¥ 1,381	<u> </u>	
Cash flows from investing activities	_	11,846	_	
Cash flows from financing activities	_	46	_	
Total	¥ —	¥ 13.273	\$ —	

# 38. SHARE PURCHASE AGREEMENT TO ACQUIRE SHARES OF TRELLEBORG WHEEL SYSTEMS HOLDING AB

On March 25, 2022, the Company entered into a share purchase agreement with Trelleborg AB, which owns shares in Trelleborg Wheel Systems Holding AB, to acquire all outstanding shares of Trelleborg Wheel Systems Holding AB (the "Transaction").

#### 1. Reason for Acquisition of Shares

Since fiscal 2021, the Group has been implementing its medium-term management plan, "Yokohama Transformation 2023 (YX 2023)," a three-year plan covering fiscal years 2021 to 2023.

While commercial tires account for half of sales in the global tire market, the Company's sales ratio of consumer tires to commercial tires is 2:1. To secure business stability and earnings growth, the growth of the OHT business, which is capable of securing a high level of earnings among the commercial tire business, has been one of the key challenges facing the Company.

With this acquisition, the Company will further expand its commercial tire business and accelerate its global expansion.

# 2. Name of the Counterparty of the Share Acquisition

Trelleborg AB



#### 3. Name, Details of Business and Scale of the Company to Be Acquired

1) Name Trelleborg Wheel Systems Holding AB

2) Location Trelleborg, Sweden

3) Title and name of representative Johansson, Anders Niklas, Lars Ivar Leijonberg, Måns Patrick

Romberg (joint representatives)

4) Details of business Manufacture and sale of tires for agricultural and industrial

machinery

5) Share capital
 6) Date of establishment
 7) Major shareholder and shareholding ratio
 100,000 Swedish krona
 October 2, 2007
 Trelleborg AB 100.0%

8) Relationship with Yokohama Rubber Co., Ltd. Capital There are no applicable matters to be reported.

Personnel There are no applicable matters to be reported.

Transactional There are no applicable matters to be reported.

9) Type of consideration Cash

10) Goodwill, identifiable assets acquired and Not determined at this time.

liabilities assumed

#### 11) Consolidated operating results of the company for the last three years (Millions of Euro)

Fiscal year	Fiscal year ended	Fiscal year ended	Fiscal year ended
	December 31, 2019	December 31, 2020	December 31, 2021
Consolidated revenue	910	836	993
Consolidated operating profit	86	100	120
Consolidated EBITDA	134	147	170

Upon this share acquisition, the shares of each of Trelleborg AB's subsidiaries that comprise the business subject to the acquisition will be consolidated into Trelleborg Wheel Systems Holding AB. The above consolidated operating results were provided by Trelleborg AB as financial figures for the entire business assumed to be subject to the acquisition. Results for the fiscal year ended December 31, 2022 are currently being examined. Figures equivalent to consolidated net assets, consolidated total assets, and consolidated net assets per share have not been provided.

#### 4. Timing of Share Acquisition

First half of 2023 (planned)

#### Note:

Approvals have been obtained in all countries and regions where prior approval based on the antitrust laws are required. We will continue to proceed with necessary procedures to complete the acquisition in the first half of 2023 as planned.

#### 5. Number of Shares to Be Acquired, Acquisition Price and Shareholding Ratio after the Acquisition

1) Number of shares 0 shares

held before the transfer (Number of voting rights: 0)

(Percentage of voting rights held: 0.0%)

2) Number of shares to be acquired 1,000 shares

(Number of voting rights: 1,000)

3) Acquisition price (Note) Approx. ¥265.2 billion (\$1,998,493 thousand, €2,040 million)

for common stock of Trelleborg Wheel Systems Holding AB, etc.

4) Number of shares to be 1,000 shares

held after the transfer (Number of voting rights: 1,000)

(Percentage of voting rights held: 100.0%)

#### Note:

The above yen amount is converted from euro at the exchange rate of ¥130 to the euro. The amount of consideration will be determined based on the terms and conditions stated in the share purchase agreement, including the addition of net interest-bearing debt, and may vary from the amount stated above. The acquisition agreement includes a performance-linked earn-out clause that could increase the acquisition price by up to €60 million depending on the fiscal 2022 financial results of the business to be acquired, which are currently being examined.

# 6. Acquisition Financing

The Company plans to finance the acquisition with its own funds and borrowings.

# **39. SIGNIFICANT SUBSEQUENT EVENTS**

Not applicable.

# (2) Other

Quarterly information for the fiscal year ended December 31, 2022

	Millions of Yen			
	First three months	First six months	First nine months	Full year
Revenue	¥ 185,590	¥ 391,483	¥ 615,764	¥ 860,477
Profit (loss) before tax	14,463	34,037	51,526	71,622
Profit (loss) attributable to owners of the parent	10,156	23,307	33,284	45,918
Basic earnings (loss) per share (Yen)	63.34	145.36	207.59	286.38
		Thousands of	U.S. Dollars	
	First three months	First six months	First nine months	Full year
Revenue	\$ 1,398,572	\$ 2,950,132	\$ 4,640,271	\$ 6,484,376
Profit (loss) before tax	108,989	256,494	388,288	539,729
Profit (loss) attributable to owners of the parent	76,537	175,636	250,824	346,028
Basic earnings (loss) per share (U.S. Dollars)	0.48	1.10	1.56	2.16
	First quarter	Second quarter	Third quarter	Fourth quarter
Basic earnings (loss) per share (Yen)	¥ 63.34	¥ 82.02	¥ 62.23	¥ 78.79
	First quarter	Second quarter	Third quarter	Fourth quarter
Basic earnings (loss) per share (U.S. Dollars)	\$ 0.48	\$ 0.62	\$ 0.47	\$ 0.59

# Glossary

Term	Explanation
AG (agriculture tire)	Agriculture tire
All-season tires	All-weather tires that can be driven in all four seasons. These tires perform similarly to summer tires in sunny and rainy conditions, and similar to studless (non-studded tires) tires on snow-covered roads. All-season tires stamped with the "snowflake mark" can be driven on roads restricted to vehicles equipped with winter tires. However, chains must be used when chain requirements are in effect (studless tires are recommended on icy and heavy snow-covered roads).
Commercial tires	Tires for trucks, buses, agricultural machinery, and other infrastructure-related vehicles that support industries such as transportation and production.
CASE (connected, autonomous, shared & service, electric)	A concept that indicates the future direction of automotive evolution.
Consumer tires	Tires for passenger cars and other vehicles used by average consumers.
Grassroots category	In motorsports, "grassroots" refers to relatively small-scale competitions that are primarily participated in as a hobby or entry-level event, and are an important foundation for the fostering of motorsports fans and the development of future professional drivers.
HAICoLab	Yokohama Rubber's Al utilization framework for digital innovation formulated in 2020. The name was created from the concept of "humans and Al collaborating for digital innovation," and is used in the development of rubber materials for new products and in the calculation of the optimal pitch arrangement for tires. It also refers to a joint research institute combining humans and Al.
Highway terrain tires	A type of tire designed for off-road driving in SUVs, 4-wheel-drives, and other vehicles that excels at on-road driving on highways and paved roads, as opposed to all-terrain tires, which combine off-road driving performance with on-road comfort.
ID (industrial tires)	Tires for industrial vehicles.
LTR (light truck radial tires)	Tires for small trucks.
MaaS (mobility as a service)	Mobility is not only a means of transportation, but a next-generation transportation service that combines various technologies such as autonomous driving and Al.
OHT (off-highway tires)	A generic term for tires used on agricultural machinery, construction vehicles, industrial vehicles, forestry machinery, etc.
OR (off the road tires)	Tires for construction vehicles.
PCR (passenger car radial tires)	Tires for passenger cars.
Pickup trucks	A vehicle used for carrying small cargo with an open storage area behind the driver's seat.
Pitch	Tire tread patterns comprise blocks of several different circumferential lengths, one of which is called pitch, with the type of pitch and its arrangement referred to as pitch variation.
Replacement market	General term for the demand and dealerships associated with replacement tires installed when the tires mounted on new cars wear out or break down.
Return sales	A sales method that creates a synergistic effect when customers select the same tire brand when replacing the old tires installed on their new vehicles with replacement tires.
Side walls	The sides of a tire. The surface is covered with a layer of rubber to protect the cord layer underneath, and the tire size, brand name, and manufacturer's name are stamped on the sidewall.
Solid tires	Tires filled with rubber instead of air. As these tires lack elasticity and resist punctures, they are used on special vehicles such as cranes, trailers, and forklifts that require durability.
SUV (sport utility vehicle)	Sport utility vehicles are suitable for everyday activities such as shopping as well as driving on unmaintained roads and other outdoor leisure pursuits.
TBR (truck and bus radial tires)	Tires for trucks and buses.
T.M.S (tire management system)	Service that utilizes a database to compile tire operation information. This system provides total support for tire management, from tire inspections to data entry, collection, and proposals, contributing to safer operations and greater efficiency.
TPRS (tire air pressure remote access system)	A tire solution service developed by Yokohama Rubber currently undergoing demonstration testing. In this system, sensors are attached to the inner surface of tires to enable vehicle managers and tire service staff to remotely monitor tire pressure, temperature, and vehicle location information in real time. TPRS contributes to labor-saving during the pre-work inspection of tires, and facilitates the recording of tire pressure information and the rapid detection of slow punctures that cause tires to gradually lose air. It also ensures appropriate tire maintenance and prevents inconsistencies during inspections, prevents accidents by detecting abnormalities, and improves fuel efficiency by maintaining proper air pressure.
Tread pattern	Various patterns carved into the part of the tire that is in direct contact with the road surface to improve drainage, driving, and braking performance, as well as minimize noise.
Wide base tires	Wide tires that can replace double wheels (sets of two tires) with a single wheel (one tire) on trucks and buses.
	Tires designed for use in low temperatures and on snow-covered roads. These include studless tires with enhanced grip on icy roads.

# **Investor FAQ**

# Q1

# In fiscal 2022, Yokohama Rubber achieved record-high business profit. Compared to other companies, your profits have grown substantially over the past few years. What is driving this growth?

Despite a challenging business environment in fiscal 2022 due to soaring raw material prices and logistics costs, as well as reduced automobile production caused by semiconductor shortages, in Yokohama Rubber's mainstay tire business, overseas sales of high-value-added consumer tire products increased, we promoted sales of off-highway tires (OHT) for agricultural machinery and other vehicles, and improved the product mix and raised prices both in Japan and overseas, all of which resulted in maintaining strong sales. Since the previous Medium-term Management Plan GD2020, we have been promoting business selection and concentration, and made efforts to strengthen highly profitable businesses and proactively invest in growth areas, which have also led to these recent achievements.

#### Q2

# What measures are you considering in response to the Tokyo Stock Exchange request for improvement affecting companies trading below 1x PBR?

To improve the price-to-book ratio (PBR), we must realize the enhancement of corporate value. This requires that we improve profitability, capital efficiency, and our ability to generate cash flows, while reducing the cost of capital through transparent disclosure and stronger governance. In terms of measures, we will build a strong financial base through the optimal allocation of cash flows to achieve both proactive investment in strategic areas and stable shareholder returns. Further, we will achieve sustainable growth through various measures, including YX2023 exploitation and exploration (incorporating sustainability and market changes), balance sheet management as growth capital, ensuring sufficient debt financing capacity, and strategic and human capital investments as growth investments for sustainable growth (expected growth rate improvement). We will also strive to reduce cost of capital by enhancing investor relations activities to promote dialogues with the market (engaging in dialogues and conducting meetings with senior management), utilizing debt under strong bank relationships, and strengthening governance by changing our governance structure. ⇒ P.34 Financial Strategy and Shareholder Return Policy

#### Q3

# What are Yokohama Rubber's views on dividends and dividend payout ratio?

Yokohama considers the improvement of total shareholder return (TSR) to be an important management issue for the enhancement of corporate value through the implementation of shareholder returns based on medium- and long-term business plans and the formation of an appropriate share price. Our policies regarding dividends and the dividend payout ratio are to provide dividends while ensuring internal funds sufficient to conduct capital investment, R&D, and other activities essential to maintaining market competitiveness and improving

earnings. Considering current performance and financial condition, we believe that we have an appropriate level of dividend payout ratio.

Going forward, Yokohama Rubber will continue to provide dividends and return profit earned from business growth to our shareholders.

P.34 Financial Strategy and Shareholder Return Policy

#### Q4

# What are the drivers of growth and future plans for Yokohama Off-Highway Tires (YOHT)?

Demand for OHT is growing worldwide, and since our acquisition of Alliance Tire Group (ATG) in 2016, OHT has continued to grow at a high annual rate of nearly 10%, reflecting its overwhelming cost competitiveness and advantage being based in India. YOHT is proactively investing in production capacity expansion to meet growing demand. In addition to expansion of the existing Dahej plant, where production capacity increased 1.6 times, the Visakhapatnam plant commenced production in August 2022, increasing production capacity by 40% in 2022.

⇔ P.23 Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

#### Q5

# What is the purpose of acquiring Trelleborg Wheel Systems (TWS) and how will it contribute to earnings?

Yokohama acquired all shares of TWS in May 2023 for the purpose of expanding earnings in the OHT business, with the acquisition expected to contribute high, stable earnings. TWS is the world's leading manufacturer of tires for agricultural machinery and industrial vehicles. This acquisition completes our product lineup of tires for agricultural machinery and construction vehicles in all categories, from basic and standard, to premium. With this acquisition, our position in the global OHT market is estimated to be the third largest in the world, and our sales revenue is expected to reach a record high of ¥1 trillion in the fiscal year ending December 31, 2023.

⇒ P.8 Helping transform the mobility industry by strengthening our presence in the OHT business

#### Q6

# What efforts are you making with regard to EVs in light of anticipated market growth?

EV tires must facilitate low power consumption and quietness. Regarding low power consumption, we have achieved increases in cruising range by incorporating a low rolling resistance compound developed using HAlCoLab Al technology. In terms of quietness, specially designed polyurethane foam is applied to the inner surface of tires to reduce cavernous resonance generated when driving on uneven road surfaces. The reputation of this advanced technological capability has led to these tires being installed as new equipment on electric vehicles, including EV models manufactured by BMW and Mercedes-AMG. Additionally, in 2023, we are conducting demonstration testing of TPRS for EV buses and utilizing the data obtained to develop EV bus tires, while at the same time strengthening support for EVs through efforts that include becoming the first truck and bus tire brand to be installed on new EVs.

⇒ P.23 Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

# Corporate Information As of December 31, 2022

# **Corporate Data**

Company Name	The Yokohama Rubber Co., Ltd.
Established	October 13, 1917
Paid-in capital	¥38,909 million
Sales revenue	¥860,477 million (Consolidated basis)
Fiscal year-end	December 31
President	Chairman of the Board Masataka Yamaishi
Head Office	2-1 Oiwake, Hiratsuka City, Kanagawa Prefecture, 254-8601, Japan
Mainstay	Tires Tires for passenger cars, trucks and buses, light trucks, mining and construction equipment, industrial vehicles and agricultural and forestry machinery, aluminum alloy wheels and automobile-related components
Mainstay Products	Tires for passenger cars, trucks and buses, light trucks, mining and construction equipment, industrial vehicles and agricultural and forestry machinery, aluminum alloy wheels and automobile-related
,	Tires for passenger cars, trucks and buses, light trucks, mining and construction equipment, industrial vehicles and agricultural and forestry machinery, aluminum alloy wheels and automobile-related components  Multiple Business High pressure and resin hoses, couplings, conveyor belts, fenders,

# **Group Sites**

 $\hbox{Business operations:}\ 29 \hbox{countries}$ 

Major regions of operation	No. of bases	No. of employees
Japan	70	9,858
Asia	40	14,352
Europe	13	1,014
North America	19	2,965
South America	3	279

# Regarding Publication of the Yokohama Rubber Group Integrated Report 2023



Masahiro Yuki Member of the Board and Officer, Head of Corporate Planning Div.

We published the first integrated report in 2022 to deepen stakeholder understanding of our efforts to create medium- to long-term corporate value. The Yokohama Rubber Group Integrated Report 2023 is our second integrated report.

In this report, we have made every effort to incorporate shareholder feedback on the previous integrated report, and we have worked to provide a clear understanding of the business model behind our efforts and the value creation story we envision for how archiving the Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023) and archiving sustainable growth.

As the director with overall responsibility for the production of this report, I hereby state that the process by which it was prepared was conducted properly and the information contained herein is accurate.

My hope is that this report will facilitate an understanding of the Group and provide opportunities for the co-creation of value with stakeholders.

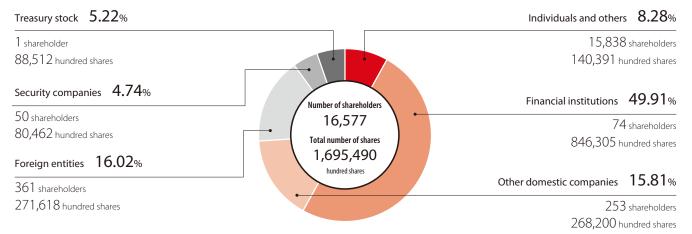
# **Share Information** As of December 31, 2022

# **Basic Information**

Sector	Rubber products
Stock exchange listing	Prime Market of the Tokyo Stock Exchange
Stock code	5101
Fiscal year-end	December 31
Record dates	December 31 (June 30 for interim dividends)

Trading unit	100 shares
Authorized number of shares	400,000,000
Number of shares issued and outstanding	169,549,081
Number of shareholders	17,486

# **>** Shareholder composition



#### > Major shareholders

Shareholder name	Holdings (hundreds)	Percentage of total (%)
The Master Trust Bank of Japan, Ltd. (trust account)	265,179	16.50
Zeon Corporation	162,700	10.12
Custody Bank of Japan, Ltd. (trust account)	146,553	9.11
Asahi Mutual Life Insurance Company	109,055	6.78
Mizuho Bank, Ltd.	61,300	3.81
The Dai-ichi Life Insurance Company, Limited	26,600	1.65
The Bank of Yokohama, Ltd.	24,999	1.55
SMBC Nikko Securities Inc.	23,703	1.47
Yokohama Rubber Business Partner Stock Holding Association	22,152	1.37
Mizuho Trust & Banking Co., Ltd. Retirement Benefit Trusts, Mizuho Bank Ltd. Account, Re-trust Trustee, Custody Bank of Japan, Ltd.	18,585	1.15



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