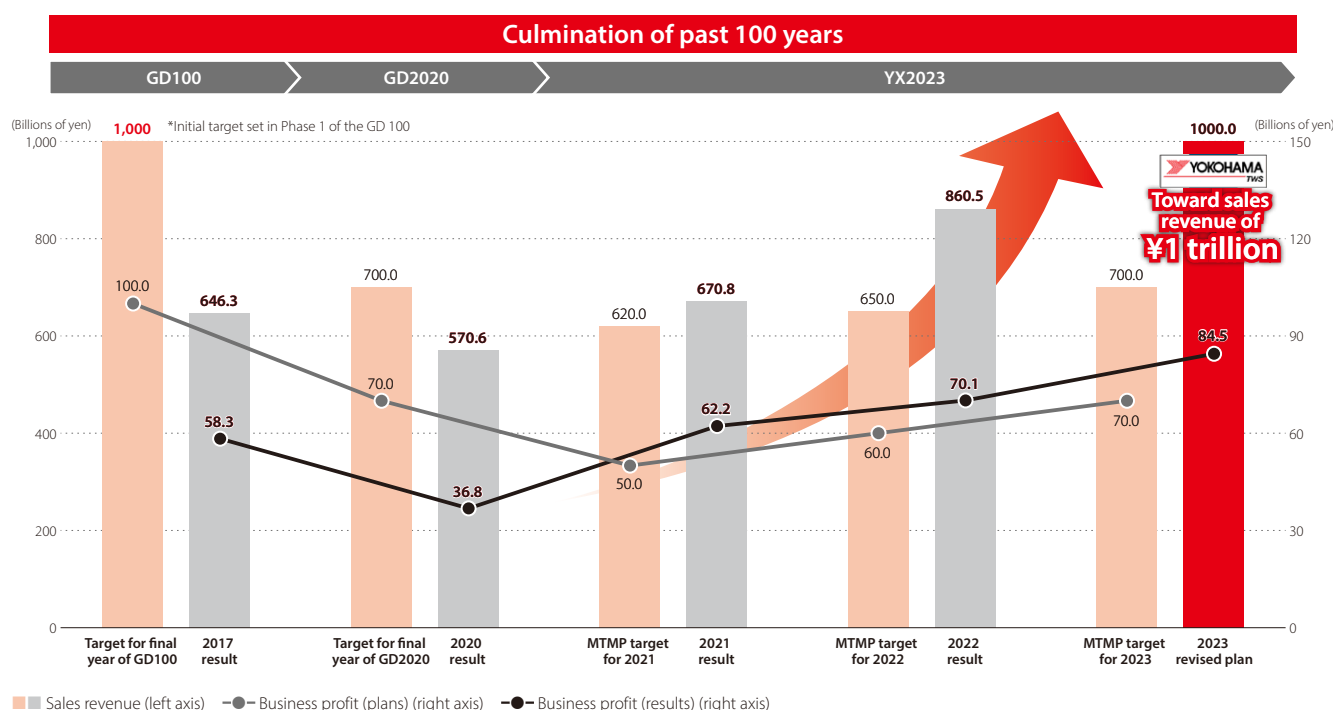


# Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

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)

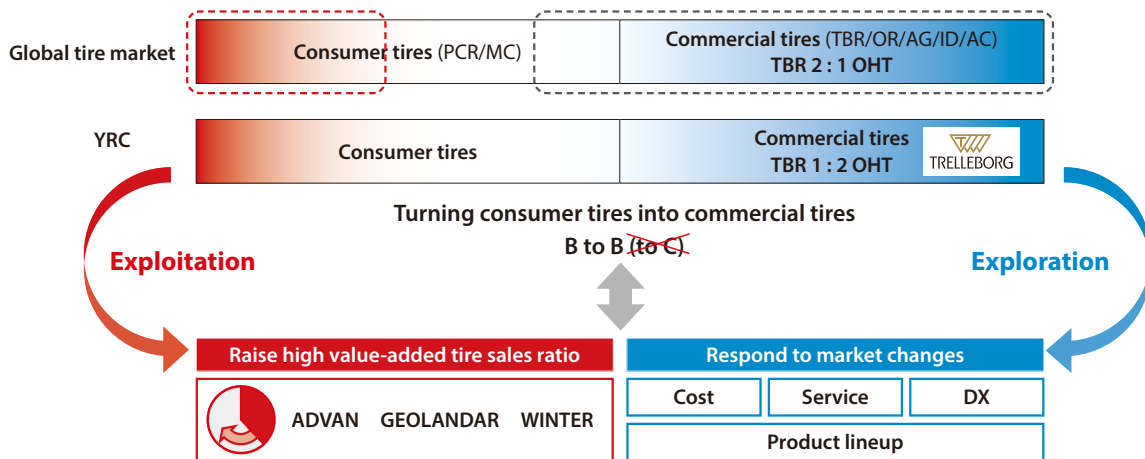
### Megatrends

#### 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

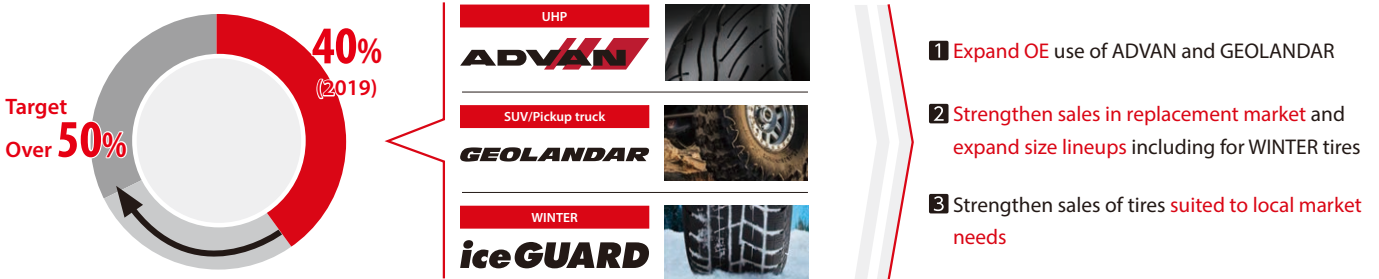
To raise the sales ratio of high-value-added tires in the consumer tire business, we aim to maximize sales with a focus on ADVAN ultra-high-performance tires, GEOLANDAR for SUVs and pickup trucks, and winter tires.

## 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.

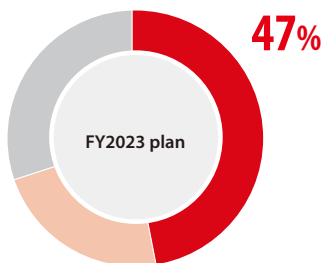
### High value-added tire sales ratio target



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%.

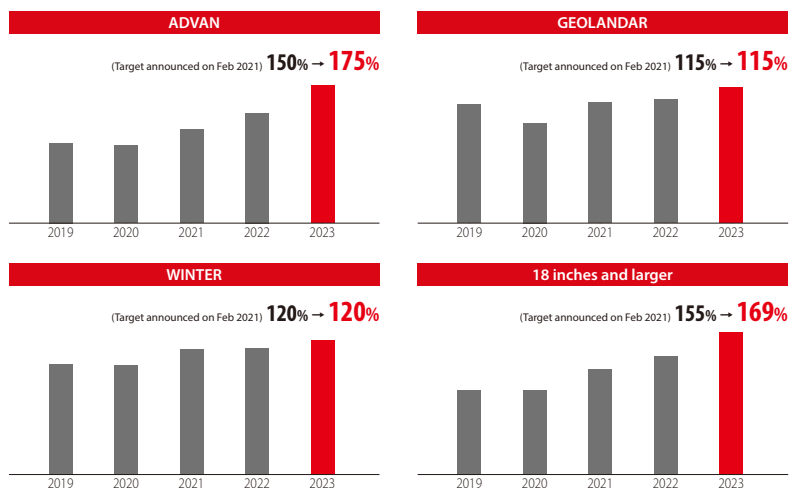
### AGW sales ratio



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 high-speed performance and mobility, which have been on the rise in recent years.



Toyota 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

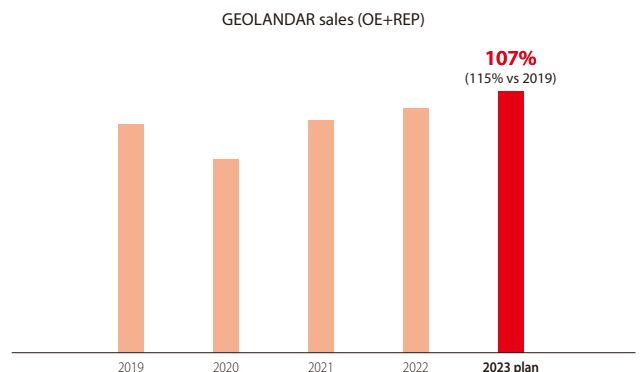
In FY2023, we will strive to further expand sales with the launch of GEOLANDAR and other new products under the theme “Mud Match.”

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

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

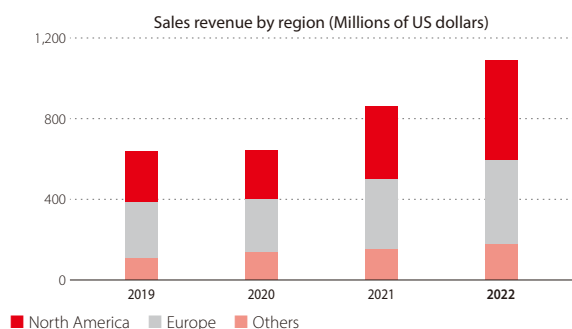


to grow well above the growth rate of the market. In response, the existing Dahej plant achieved a 1.6-fold increase in production capacity, and construction of the Visakhapatnam plant began in the third quarter of 2020. This plant was originally scheduled to commence operations in 2023, but to meet 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.

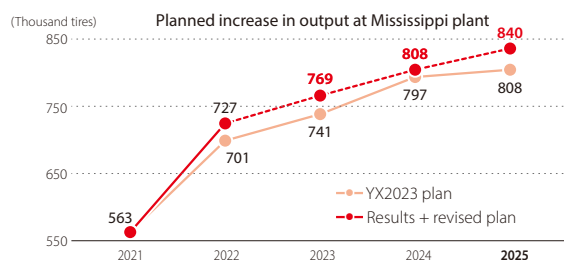
#### Cost advantages supporting sales growth



#### 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.

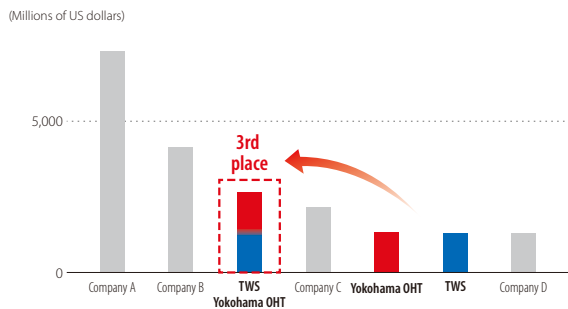
## Medium-term Management Plan YOKOHAMA Transformation 2023 (YX2023)

### Fiscal 2023 Initiatives and Issues Going Forward

#### 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



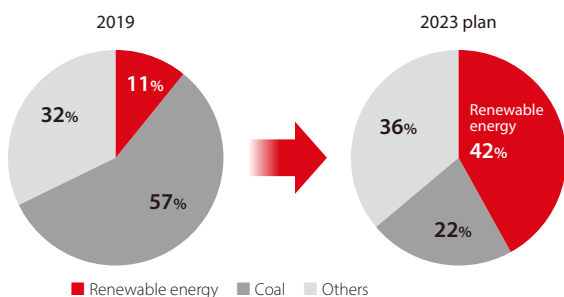
\* Our estimate

#### 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

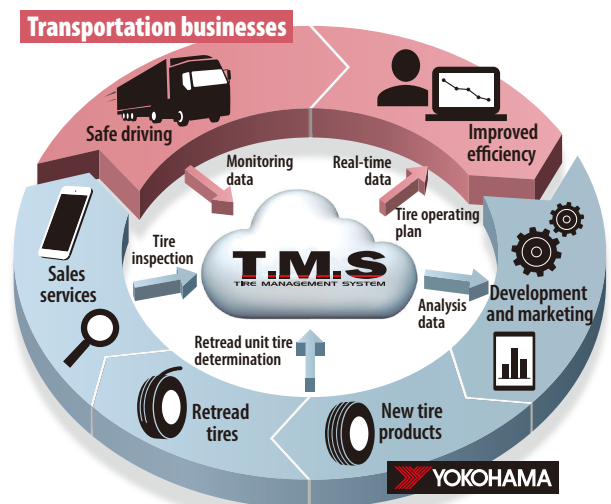
We will make additional investments in the Mie Plant to increase production capacity by approximately 100,000 tires to meet brisk demand for standard-sized truck and bus tires, and consider further production increases going forward.

#### 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	
<b>Hose and Couplings</b> <b>Growth driver</b> Increase production capacity, reorganize production sites	<b>Industrial Products</b> <b>Stable earnings</b> Maximize market share
Business restructuring	
<b>Hamatite</b> Transfer completed in November 2021	<b>Aerospace Products</b> <b>Structural reforms</b>

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