Material issues relating to value creation

These material issues illustrate the unique value that the Toyo Tire Group offers in its dedicated mission to society and the value that links directly to the Group's purpose. We believe that the value we create and deliver through our business activities must contribute to the building of a society of sustainable mobility.

Help create a society of sustainable mobility



Support the enjoyment of mobility for all



2024

- Environmental contribution (CO₂ emissions reduction): Reducing tire rolling resistance, improving EV compatibility, saving resources
- Safety: Maintenance-free products, diagnosis of tire wear
- Ultimate enjoyment of driving and sophisticated features

Our policy

We know that the sustainable future for tire and automotive parts manufacturers will only be ensured once a society of sustainable mobility has been created. That's why we are working to help establish a society of sustainable mobility that boasts less environmental impact, fewer traffic accidents and efficient transportation. In addition to providing the necessary elements for promoting sustainability, we believe that using our unique products and services to satisfy the various features that people expect from superior mobility life will create added value designed to support a diverse mobile society, so that is what we intend to do.

Organizational responsibilities (April 2024)

Spearheaded by our R&D Headquarters, we are working together with product planning, production management, sales planning and digital transformation (DX) functions and promoting sustainability-related activities based on various themes that correlate with the aims of our medium-term business plan.

The Technical Committee oversees the overall implementation of those activities and reports progress to the Sustainability Committee

Story 1: Reducing the environmental impact of mobility

Reducing vehicles' CO₂ emissions is a challenging issue that needs to be addressed throughout the supply chain in order to achieve carbon neutrality by 2050. Although the global shift to EVs is slowing, EVs will remain an effective means of transportation to reduce emissions in the medium- to long-term, and the shift is expected to continue. Despite the backlash, we believe it is important to systematically and effectively pursue initiatives to reduce CO2 emissions from vehicles.

At Toyo Tire Corporation, our goal is to help reduce CO2 emissions per tire by 20% by 2030 compared to 2019 levels and our functional organizations collaborate to develop products.

Our R&D function strives to consistently update basic technology over a medium- to long-term span in anticipation of automotive industry trends and the level of performance and functionality required of tires. While engaging in activities to improve the precision of material compounding and tire design, we have established an R&D system that can respond at a high level to the fuel efficiency performance and EV requirements of next-generation vehicles (reduced rolling resistance, larger diameter tires, quietness, etc.). Material development is one of the



approaches we use to reduce rolling resistance. We use Nano Balance Technology, our proprietary platform technology for rubber materials, to facilitate more accurate predictions regarding specific material properties and optimize material structure, and we are promoting its use in practical development. Our engineering and production functions are collaborating to support product development by, for example, improving processing methods

Our product planning function plans model changes (rolling) in cooperation with our R&D and sales functions, based on our medium-term product plan. While keeping a close eye on market trends, we are incorporating upgraded functions and performance, including fuel-efficiency, that are compatible with EVs into the development requirements for our priority (core) products. At the same time, we plan to launch differentiated products for EVs.

Through these activities, we will contribute to the creation of environmental value by implementing business strategies that appropriately respond to the shift to EVs while continuing to improve the fuel-efficiency of our products.

ain I Value creation

Specific examples of improvements in fuel efficiency with each new model release

Developed a fuel-efficient compound using Nano Balance Technology. A new silica dispersing agent was used to reduce rolling resistance and improve wet performance and wear resistance. These features were optimized in high dimensions by distributing the silica more evenly. Furthermore, part of the silica dispersing agent was made using environmentally friendly and naturally derived sustainable materials.



Development of EV tires for pickup trucks & SUVs

In our Sustainability Management Policy, published in 2022, we set out our unique EV strategy as scenarios for achieving medium- to long-term value creation.

EV Strategy

- Develop technology for electric SUVs and pickups trucks
- Develop differentiated products for SUVs and CUVs according to trends in the North American market

Based on these scenarios and our medium-term product plan, we developed the OPEN COUNTRY A/T III EV tire for pickup trucks and SUVs, which we launched in the North American market in February 2024.

Taking advantage of the features of the OPEN COUNTRY A/T III, which has been well received in Japan and the North America, the EV tires offer both a powerful off-road driving experience and on-road maneuverability and comfort, as well as an improved cruising range thanks to their reduced rolling

resistance. Wear resistance and durability to handle the instant torque, rapid acceleration, and additional weight, characteristics of EVs, are also maintained. The tires also meet the requirements for the snowflake mark*1, which is proof of their suitability for use year-round on a wide range of EVs.

*1 Tires that meet the severe snow-grip requirements stipulated by the United Nations onomic Commission for Europe (UNECE)



OPEN COUNTRY Α/Τ[™]Εν

Unique aerodynamic simulation technology

The OPEN COUNTRY A/T III EV was designed using Mobility Aerodynamics (aerodynamic simulation), our proprietary technology. The tires feature "AEROWING™" sidewall lug design to reduce wind drag generated while rotating.

Aerodynamic refers to wind drag generated when driving. Reducing wind drag contributes to improving fuel efficiency and, in the case of EVs, increases the cruising range per charge.

Analyzing the airflow around the tires while driving and optimizing the tire profile helps reduce the impact*2 on a vehicle's



Visualization of air flows around vehicles and tires

Story 2: Ultimate driving enjoyment and a diverse range of mobility-related lifestyles

Toyo Tire Corporation's unique strategy applies the Company's core strengths to developing technologies and commercializing products that offer exquisite design features and the ultimate enjoyment of driving, while demonstrating high commitment to environmental and safety considerations.

We have established a strong business model in North America in particular by communicating minute detail to local dealers in order to engage more deeply with discerning customers seeking the ultimate driving enjoyment, and by creating a consistent operation that covers all stages from market research through production and sales to facilitate speedy product supply. Our North America sales department leverages the brand recognition and dealer relationships, which are assets that have been cultivated in this way, to gain a quick and firm grasp of the needs and wants of local customers and the problems they may be experiencing for internal feedback. The sales department sometimes cooperates with the technical department and goes out into the field to gather insights on customer preferences so that we can develop differentiated products and fuel a virtuous product-development cycle. The strongest part of this process lies in the effective communication



OPEN COUNTRY A/T OPEN COUNTRY M/T

aerodynamic characteristics. Our Mobility Aerodynamics technology enables us to predict the aerodynamics of an entire vehicle, taking into account the ground contact, deformation and rotation of the tires when driven. We use T-MODE (design support technology) to design tires that can improve the aerodynamics of each vehicle model.

*2 Tires are said to account for approximately 15% of the total aerodynamic drag of an entire vehicle

between the head office in Japan and the overseas sales companies that transcends the physical distance between them. Information on local customer feedback and trends is exchanged constantly through formal settings and on other various occasions, and reflected in product planning. The whole process is underpinned by our fundamental shared values and commitment to supporting a bountiful range of mobility-related lifestyles through our products while also maintaining basic tire performance.

Toyo Tire Corporation also participates in what are considered some of the world's toughest international off-road races, such as the Dakar Rally and BAJA 1000, and we channel the knowledge gained through these experiences into product development in order to sharpen our technology and enhance product performance. We glean particularly useful information from the Dakar Rally's challenging desert and rocky terrain which we use to improve durability, a factor leading to product reliability.

Thanks to these continued efforts, our Open Country tire brand has been able to establish a firm position in North America's SUV and pickup truck markets.



ain I Value creation

Open Country for diverse driving experiences and lifestyles

Toyo Tire Corporation is pursuing its own marketing activities centered around the Open Country brand and building new fanbases in other markets outside of North America as well.

As part of our strategy, we focused on the possibility that excellently designed tires can transcend the narrowest concepts of mobility and earn a place in people's daily lives as a lifestyle facilitator that can foster a particular worldview and culture. In some part of Asia, our sales department works together with local distributors on promotions that effectively employ social media to highlight the design features of our tires to car users who like to camp outdoors.

In Japan, we advertise through means other than automobile magazines, such as outdoor, fishing and fashion related media, to reach car owners who are not particularly interested in tires and encourage them to choose their tires to suit their individual lifestyles. Our unique approach to the pursuit of ultimate driving enjoyment is to foster a set of values that inspires customers to change their tires not because they are worn out as consumables but because they want to replace their current tires for a more appealing luxury product. These marketing activities have helped fuel a growing awareness of the Open Country brand in Japan. especially among users who seek highly customized products. Going forward, we intend to use test-drive meets for tire users to promote awareness of the Open Country brand and its essential pursuit of "functional beauty" that embodies reliable performance.

TOPIC / Open Country R/T receives *Minkara* PARTS OF THE YEAR 2023 Hall of Fame Award (SUV/4X4 tire category)

Operated by LY Corporation, *Minkara* (short for "Everyone's Car Life" in Japanese) is one of Japan's largest specialist automobile social media platforms where car lovers post and discuss various car-related topics.

Minkara aggregates the number of parts user reviews and the scores, and ranks parts with the highest support in its PARTS OF THE YEAR survey announced twice a year in the middle and the end of the year. The Open Country R/T tire received the PARTS OF THE YEAR 2023 Hall of Fame Award* (SUV/4X4 tire category) for the second consecutive year. Users particularly appreciated the tire's high performance and unique design made for comfortable driving not only on ordinary roads but also off-road on dirt tracks. Our Open Country A/T EX tire won third place in the same category.

We never forget that we are a brand that is nurtured by its users and developed together with users, and we remain committed to further increasing the quality of our brand going forward.

*This award is presented for parts that have garnered unwavering support in PARTS OF THE YEAR rankings over the past several years



OPEN COUNTRY R/T



Story 3: Providing safety for evolving mobility in a changing society

As society changes and mobility technology advances with a wider use of IT and data and development of autonomous vehicles, we are beginning to see how the mobility landscape is reshaping. We are committed to developing technologies, products and services to provide safety that meets the needs of the evolving mobility environment.

Supporting safe driving (providing data to ensure driver safety)

Tires are the only components of a vehicle that actually come into contact with the road surface, and we are developing sensing technology that can collect various types of information from tires. The concept we are working to take forward is to create new added value by turning tires into data acquisition devices. Using this technology, we developed a software application that processes data inputs from sensors attached to tires to derive the limits of the required tire performance, uses them to determine whether the tire force*3 of the running tires is within the performance range required for the road conditions, and provides real-time display. We are currently working to improve sensing accuracy by taking measurements of road surfaces under a range of conditions and proving the concept by testing the application on driving tracks. We will continue developing these technologies to serve as a part of safety systems required for autonomous driving.

*3 Tire force is a term we use to describe the real-life tire performance, as estimated from data inputs from the tire such as air pressure, temperature, identified road surface condition, load, wear, and any anomalies detected



Taking road surface measurements using mounted sensors



Application displaying visualization of tire force in a run



Maintenance-free airless tires

A likely effect of changes such as self-service gas stations, home charging of EVs and wider adoption of car sharing is that there will be fewer opportunities for drivers to get tires serviced by experts. Also, cars need to be lighter in order to save energy and resources, and tire manufacturers face the challenge of providing safety in the next generation of mobility without the need to carry a spare tire. We are tackling this challenge by developing airless tires designed to provide maintenance-free, spare-free solutions.

Our "noair" airless concept tire achieves the level of durability and maneuverability close to that of pneumatic tires and can be fitted on passenger vehicles for driving. As part of the path to commercialization, we are currently trialing the *noair* tires on last-mile delivery vehicles. We are paying close attention to the legislative and regulatory direction regarding the use of airless tires on public roads while continuing our development work, taking into consideration potential use cases such as tires for future mobility vehicles and as a recycling solution.



Airless tire development over the years



Golf cart using "noair" tires

Materiality

Domain II Foundation for value creation

Material issues that underpin value creation

These material issues are recognized as an important foundation that supports the creation of unique value. Our focus is to continue to create value that delights our customers and society at large through the offering of unique products and services. To do that, we need to constantly strengthen the foundation for propelling and promoting the value creation and achieving sustainable development for the Toyo Tire Group.

03

Support diverse talent with motivating challenges and job satisfaction



- Demonstrating ability and fostering motivation (developing talent)
- Securing diverse human resources (promoting diversity)
- Creating healthy working environments (reforming working styles)



Continue innovating next-generation mobility technology



• Enhancing the development of materials and platform technologies for our products for a society of next-generation mobility

- Creating recycling technologies for products and raw materials
- Innovating low-impact alternatives to substances of concern

Human resource base

Our policy

As part of our efforts to build a management foundation to support sustainable growth, we stipulated the development of a framework in the Medium-Term '21 Plan that would enable diverse human resources to work together organically and play an active role based on enthusiastic job satisfaction, as well as a training system that upholds individuality, quality and ability. We conduct flat evaluations based on ability, aptitude and performance, and develop human resource base designed to ensure the best mix of human resources to enable diverse talent, regardless of their nationality, gender, age, background or other factors, to grow and flourish, and to get the right people into the right jobs. In terms of human capital investment, we inject resources into various initiatives with a view to developing talent, promoting diversity and creating healthy working environments. We aim to help create value through our business by, for example, investing in systems that promote the planned development of business managers and professional talent in each organizational function, investing in the building of office environments and human resource systems that make diverse employees feel comfortable, and creating working

arrangements and tools that help improve employee performance and communication.

Organizational responsibilities (April 2024)

The Organization & Personnel Committee, which is under the jurisdiction of Executive Committee, discusses and determines policies and important measures for strengthening the Group's human resource base, and the Corporate Headquarters is directly responsible for supervising the measure execution of these policies. The areas of activity relating to human resources that are entrusted to the Sustainability Committee are also based on these policies, and the committee will consult with the Organization & Personnel Committee when necessary.

Demonstrating ability and fostering motivation (developing talent)

In 2021, we launched a new human resource evaluation system to define a clearer picture of the type of talent required to support sustainable growth for the Toyo Tire Group, to clarify company expectations for individual roles at different levels, and to better motivate talent to achieve results and pursue personal growth. We are building an integrated system by promoting well-balanced evaluations with an emphasis on dialogue, raising remuneration levels, and introducing training programs that help improve individual capabilities. In April 2023, we clarified our expectations regarding the ideal human resources profile and expected roles at our production sites. By conducting employee evaluations and adjusting their treatment based on such expectations, we aim to motivate employees to perform at a higher level and achieve better results. We also conduct career-building interviews with each employee and formulate human resource development plans to promote the active participation of all employees

Having positioned talent development as the cornerstone of this new system, we have been focusing on training and development since 2022. We have added new mandatory training programs on conceptual points designed to help employees fulfill their expected roles and correctly follow company philosophy at each level, or to help our employees acquire vital basic knowledge on digital transformation (DX), ESG, or other subjects. We have also updated our training for divisional general managers and general managers to help them acquire the necessary qualities and skills for developing effective management perspectives, managing their own personal transformations, and displaying leadership on medium- to long-term issues. Furthermore, as part of our drive to train more management candidates, we are also promoting cross-border training at partner universities and other planned personnel transfers including

Executive Committee	Organization & Personnel Committee	
	Consults	
	Sustainability Committee	
	Corporate Headquarters • Corporate Infrastructure Division Human Resources and General Affairs Department of each site or Group company	

overseas transfer, to help build a firm pool of human resources. Periodic employee surveys have confirmed that these new personnel evaluation systems and other relevant measures have indeed helped motivate employees in the way we expected.

Training held in FY2023 (Toyo Tire Corporation) By level

Name	Eligibility	Hours to complete	No. of participants
New recruit training	New recruits with university degree or higher	93	27
Follow-up training	Second-year employees with university degree or higher	8	27
Instructor training	Instructors	7.5	24
Training for senior-level administrative staff	vel Newly appointed senior-level administrative staff		29
New assistant manager training	ing New assistant managers		43
New manager training	New managers	16	36
New general manager training	New general managers	17.5	6
New section leader/assistant supervisor/assistant manager training	New section leaders/assistant supervisors/assistant managers	14	34
Evaluator training	Primary evaluators and above	4.5	59

Selective training

Name	Eligibility Hours to complete		No. of participants	
Selective training I	Selected employees	40	5	
Selective training II	Selected employees	48	5	
Pre-assignment training (Face to face)	Employees being assigned overseas	3.5	5	
Pre-assignment training (e-learning)	Employees being assigned overseas	6	3	
Language training	Employees being assigned overseas	48.6	9	

Securing diverse human resources (promoting diversity)

Fostering a culture of mutual respect among diverse human resources and establishing a culture of cooperation and collaboration are both important for creating unique Toyo Tire value.

We work together with universities when recruiting new graduates to ensure we secure diverse human resources, opening our doors to foreign students studying at Japanese universities and Japanese students studying at overseas universities, and actively approaching doctoral degree holders. At the same time, we are actively employing mid-career talent with experience at other companies, who can play an important role in supporting the company's growth stage. Meanwhile, we are rehiring human resources who have turned 60 and are creating mechanisms to facilitate the active participation of people with disabilities. We have also built a job evaluation structure that can respond flexibly to diverse employees' job and career preferences in both specified and general employment. In spring 2024, we introduced evaluation standards that would enable us to treat both human resources with outstanding management skills or the power to drive management strategy and personnel with specialist technological expertise or specific skills who have reached retirement age in the same way as we treat our current managers and employees under the age of 60. This move was designed to improve motivation among elder employees and encourage the nurturing of future successors. We expect these new structures and standards to have a positive internal impact and help invigorate our organization.

In the five years leading up to 2020, we doubled the

Employee diversity (Toyo Tire Corporation, full-time employees)

Total	3,672 (-0.5% y/y)
By age	Under 30 18.0%
	30-50 60.7%
	Over 50 21.3%
By gender ^{*1}	Male 92.8% (-0.3 pts y/y) Female 7.2% (+0.3 pts y/y)
People with disabilities	64 / 2.51% (As of the end of January 2024)
Employees from countries other than Japan ^{*2}	14
Total management personnel ^{*3}	867
Management by gender*1	Male 93.8% (-0.5 pts y/y) Female 6.2% (+0.5 pts y/y)
Employees from countries other than Japan ^{*2} in management	0.6% (-0.1 pt y/y)

*1 Data by gender; Refers to data based on the sex assigned at birth. We do not have guantitative data on gender identity because it is difficult to obtain, but we aim to create workplaces where all employees can take an equal active part.

*2 Data on employees from countries other than Japan: Befers to data on foreign nationals as defined in the Nationality Act of Japan

*3 Including assistant managers

Creating healthy working environments (reforming working styles)

We believe that our unique work styles and working environments maximize the capabilities and vitality of diverse human resources and organizations. Following the transition to class V for the novel coronavirus in 2023, we decided to use internal transformation to

percentage of women at the assistant manager level from 2.03% to 4.65%. Now, we have set a new goal of raising the ratio of female assistant managers promoted to manager level or higher compared to the similar ratio for men to between 80% and 120% in the five years from 2021 to 2025. (End 2020: 70%, three-year average for 2021 to 2023: 75%).

As part of our quest to empower women, we hosted an event in March 2023 for general managers and above and female employees which featured lectures by external experts and a panel discussion. Female employees exchanged opinions in workshops on any issues they have regarding the Company's current policies and work styles, and the Human Resources Department used that feedback to help compile more effective future measures. In November 2023, as part of our aim to nurture a corporate culture that embraces diversity more earnestly and fosters innovation, we conducted training sessions on unconscious bias for executives, where they deepen their understanding through case studies. We are also seeking to expand our repertoire of e-learning resources and theme-based training sessions on D&I issues such as LGBT, empowering women and harassment.

While the Group has a uniform compensation system for men and women with the same job qualifications and the same level of responsibility, our analysis shows that the differing ratios of men and women in management positions affect wage performance. We will actively promote the development and promotion of female employees to enable us to ultimately eliminate wage disparities.

Number of employees (Nonconsolidated)



the ratio of female employees / women promoted to section manager or higher*3 (Nonconsolidated)



invigorate the Company and drive growth. We did that by enabling employees to flexibly select the work style and the workplace that best suited them and by creating working environments that encouraged all employees to tackle their work autonomously and independently. We introduced various work styles with remote work options and renovated our head office work spaces to satisfy various needs for cooperative, harmonious or concentrated working environments. Over 90% of employees who responded to our survey said they were satisfied with the expansion of work style options and the ability to work freely and autonomously

Regarding the need to help employees achieve a good work-life balance, we seek to improve our understanding of any changes in our employees' lives caused by different life events and to provide ways to help them achieve a healthy work-life balance. We have set up various systems that allow employees to fulfill their childcare and nursing care responsibilities, such as mechanisms for taking leave that enable employees to concentrate on raising children up to two years of age and care for family members (for families requiring nursing care within the second degree of kinship, up to one year). We have also worked hard to establish systems and nurture a workplace environment that are more conducive to men taking childcare leave. In addition, we have established a system that allows employees to reinstate and use annual paid leave that expired from two years ago in the event of an injury or illness, childcare or nursing care,

Childcare leave utilization update

FY2020		020	FY2021		FY2022		FY2023	
	Utilization rate	Number of employees						
Male employees	7.9%	10	16.9%	22	35.4%	34	50.5%	51
(No. of employees taking over one week's leave)		(6)		(7)		(12)		(38)
Female employees	100%	10	100%	3	100%	7	100%	12

Employee opinion survey

It is important that our employees should feel proud of what they do and are motivated to create value. We have been conducting a bi-annual employee awareness survey since 2021 to capture a snapshot of our organizational culture. The survey results and detailed analysis are shared with the Executive Committee and feedback is provided to each department. Our efforts to create and implement improvement action plans based on deep reflection are starting to bear fruit as the cycle takes hold. Each department is encouraged to implement autonomous and proactive initiatives based on their individual strengths and

Joint human resource development program with Doshisha University

In March 2024, we signed a five-year comprehensive partnership agreement with Doshisha University. The partnership seeks to promote the use of mutual high value-added resources to foster human resources who can contribute to society and realize beneficial technologies.

We will promote multi-layered collaboration on multiple different research themes, develop future technical leaders and accelerate the implementation of innovative technologies that are

volunteer activities, hospital visits, hospitalization, pregnancy, infertility treatment, or other reasons. Meanwhile, following labor-management consultations, our administrative and technical bases have designated several promotional days a year for encouraging employees to take their annual leave and achieve a better work-life balance. At the same time, we encourage employees at production sites to systematically take annual paid leave in line with the annual production plan. In fiscal 2023, the annual leave utilization rate stood at 64.8%, an increase of seven points over the past three years.

We achieved the targets set out in the action plan formulated based on Japan's Act on Advancement of Measures to Support Raising Next-Generation Children, and received Kurumin certification from the Minister of Health, Labour and Welfare in 2020. That action plan was subsequently updated in 2024 to help expand our childcare support systems and improve working environments. The revision is designed to boost childcare leave utilization rates to 100% for both men and women by, for instance, offering paid parental leave to care for a sick child and possibly expanding the number of eligible paid childcare leave days.

weaknesses. The Human Resources Department regularly monitors the progress of each department, and incorporates common issues into the development of company-wide policies and system reviews. The 2023 survey pinpointed issues relating to shift workload in the production department so we set up a project to promote improvements together with labor and management. Linking our philosophy, systems, events, and communication will enable us to form a unique culture and increase employee job satisfaction.

useful to society. We intend to make the most of the learning opportunities and venues for recurrent employee education that the university offers to nurture corporate engineers through industry-academia collaboration. At the same time, we will work together with the university career center to offer businessfocused career advice to students and help them learn how to choose their future independently and develop their work attitudes.

main II Foundation for value creation

Platform technologies

Our policy

The Toyo Tire Group believes that the value we provide through our products and services must support the evolution of mobility required for a new age. We will continue to challenge technological innovation to help build a society that exists in harmony with the environment and supports safe driving.

Organizational responsibilities (April 2024)

R&D Headquarters is responsible for promoting initiatives in this area. The Technical Committee oversees all initiatives and reports progress to the Sustainability Committee.

Expanding the use of sustainable raw materials

We believe it is our mission as a manufacturing company to help promote the transition from a society that consumes resources to a society that circulates resources. We conduct research and development with the aim of increasing the ratio*1 of sustainable raw materials^{*2} used in our products to 40% by 2030, and 100% by 2050. That ratio reached 26% at the end of 2023.

By 2025, the Group plans to gradually introduce products made from recycled raw materials, such as recycled rubber made from used tires and recovered carbon black (rCB). Furthermore, we are developing technologies to increase the use of renewable

raw materials, such as synthetic rubber made from biopolymer biomass (biomass-derived butadiene rubber and biomass-derived styrene butadiene rubber). This would lead to a reduction in the amount of petroleum-derived raw materials used, which have a large impact on climate change, and help reduce GHG emissions over the tire lifecycle.

- $\boldsymbol{*}1$ The ratio is based on the weight of sustainable raw materials used in products at the end of each year.
- *2 Toyo Tire Corporation defines sustainable raw materials as recycled raw materials and renewable raw material



Ratio of sustainable raw materials: targets and actual results



Intellectual property

We pursue technological innovation and product development designed to realize an environmentally friendly society and an era of safe mobility. However, we believe that the new technologies and products we create through these initiatives only truly acquire social value when they are delivered into the hands of our customers and put to use. We acquire the intellectual property rights that underpin the technical support required to enable the

safe use of the products that result from our research and development into recycled raw materials, renewable raw materials, fuel-efficient rubber compounds and other areas. We believe that these ongoing intellectual property initiatives will help create value for the future era of mobility, and also secure our own presence in that arena.

TOPIC / Developing concept tires made from 90% sustainable raw materials

In January 2024, the Toyo Tire Corporation developed a concept tire made from 90% sustainable raw materials. That represents a dramatic increase compared to the previous highest ratio of sustainable raw materials in our tires of 50%*1

The concept tire was made from approximately 60% renewable raw materials, including biomass-derived butadiene rubber, biomass-derived styrene butadiene rubber, rice husk ash silica, plant-based oil, and biomass-derived polyester fiber, and roughly 30% recycled raw materials, including the butadiene rubber derived from CO₂ that we successfully developed together with the University of Toyama, rCB, recycled bead wire and recycled steel cord.

Another impressive feature of the tire is its ability to minimize the rolling resistance co-efficient, which greatly helps reduce GHG emissions throughout the tire lifecycle and improves the cruise range of EVs. It achieved AAA-equivalent fuel efficiency, the highest level of rolling resistance in the tire labeling system*2.

Going forward, we will continue to perfect this tire's technological innovation and press for early commercialization as a product that can help realize an era of sustainable mobility.

- *1 Ratio of sustainable raw materials used in the OPEN COUNTRY M/T-R tire supplied and installed in vehicles participating in Dakar Rally 2024
- *2 A voluntary industry standard established by the Japan Automobile Tyre Manufacturers Association, Inc.: JATMA. Tires that meet certain values on both rolling resistance and wet-grip performance are defined as "fuel-efficient tires." The system encourages a clear labeling method (display method) that ensures consumers receive the appropriate information

Efforts to reduce TRWP

Tire and road wear particles (TRWP) are dust produced by friction between the tire and the road surface that is a mixture of tire tread and road paving materials. Since the dust is discharged into the atmosphere, tire manufacturers view the need to reduce TRWP as a key issue. Any wear on tires does impact safety, comfort and fuel efficiency, so we are always striving to improve wear resistance through materials development and improved tread design. For example, we successfully improved wear resistance by designing an optimal compound polymer nanocomposite (rubber with highly uniform carbon black dispersion). This was

*3 One of the sector projects of the World Business Council for Sustainable Development (WBCSD)





The sidewall design is in the motif of 'sustainable" and "electric'

achieved through advanced nanofabrication using Nano Balance Technology, our fundamental material design technology. We also actively participate in industry groups, the Tire

Industry Project (TIP)*3 and JATMA, to conduct research and study ways to mitigate the impact of TRWP since there are still many things about TRWP that have yet to be determined. We will continue to contribute to the industry's efforts in this area, while also using any knowledge we acquire though these industry-wide activities to improve our own initiatives on reducing TRWP.

image



performance by **21%*** compared to the conventional M125ZB low-maintenance ribbed tire

*Source: Toyo Tire Corporation

Domain III Risk management

Material issues relating to risk management

There are various social responsibilities that we must fulfill as a company and that form the premise of our business management. These material issues epitomize the solid foundation required to ensure a sound and healthy environment and enable us to create our own unique value.

Material issue

Pursue decarbonization in all corporate activities



- Responding to climate change risks and opportunities (TCFD)
- Reducing greenhouse gas emissions
- Increasing use of clean energy

Material issue



- Procuring sustainable natural rubber
- Implementing supplier management and responding to conflict minerals risks
- Promoting efficient logistics



Ensure the fundamentals of manufacturing: quality and safety

- 3 GOOD HEALTH AND WELL-BEING
- Improving quality and increasing customer satisfaction
- Promoting improved awareness of tire safety

Decarbonization

Our policy

The impact of climate change is becoming increasingly severe and society's demands regarding mobility are increasing all the time. The mobility business lies at the very heart of the Toyo Tire Group operation and, as such, we recognize that addressing climate change is the most important issue, and one which has the power to greatly influence our growth. For that reason, we are committed to reducing greenhouse gas (GHG) emissions and expanding the use of clean energy in order to achieve the long-term goals set forth in the Paris Agreement. We also support the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and strive to disclose information based on the TCFD framework in order to stimulate dialogue, engage stakeholders and promote climate change initiatives.

Organizational responsibilities (April 2024)

The Toyo Tire Sustainability Committee is chaired by the president and meets four times a year. The committee reports, deliberates and makes decisions on how to respond to climate-related and other sustainability issues, and what progress is being made. The Decarbonization Task Force, which sits under the Sustainability Committee, discusses climate-related activity plans, targets and KPIs, and the Sustainability Committee regularly confirms and monitors the status of those activities.

Any climate-related matters that have been debated and approved in the Sustainability Committee are then reported to or debated in the Executive Committee and reflected in the formulation or review of our annual and medium-term business plans. The developments are reported to the Board of Directors in a timely and appropriate fashion.

Climate change risks and opportunities

We conducted scenario analysis to ascertain the impact of climate change on the Group's business activities.

Scenario analysis process



1. Select scenarios to use and understand the outlook of each scenario

We assessed the impact of risks and opportunities in a baseline scenario (3-4°C scenario) and a transition scenario (1.5°C scenario).

Baseline scenario	
Scenario outlook) No new political policies or stronger regulations other than what is currently envisioned GHG emissions increase in some areas following economic growth Extreme heat, heavy rainfall and other natural disasters intensify as temperatures rise	(
Main scenarios referenced) IEA Stated Polices Scenario (STEPS) IPCC SSP5-8.5	



Transition scenario

(Scenario outlook)

- New policies and stronger regulations are enacted to curb climate change
- Global GHG emissions decline to net zero by 2050
- Climate change causes sea level rises and changes in weather patterns, but they remain below those in the baseline scenario

(Main scenarios referenced)

- IEA Sustainable Development Scenario (SDS)
- IEA Net Zero Emission Scenario by 2050 case (NZE)
- IPCC SSP1-2.6

Domain III Risk management

2. Investigate risks and opportunities, 3. Assess significance, and 4. Calculate the financial impact of material risks and explore countermeasures

We identified climate-related risks and opportunities for each scenario and evaluated the significance of risks and opportunities based on the probability of certain events occurring that could prove to be pertinent factors in each risk and opportunity and the degree of impact on the expected costs and other factors in our business. Based on the results, we started to calculate the financial impact of risks that are expected to be significant over the medium to long term, and explore possible countermeasures.

Highly significant risks

Scenario	Туре	Climate-related events	Impact on business Main financial impact		Significance	
Baseline	Chronic Changes in climate pattern		 Migration of natural rubber tree crop zone, decline in quality Energy supply system instability Increased demand for crude oil, natural gas, etc. 	 Increased raw material prices (natural rubber) Increased R&D costs (alternative raw materials) Decreased sales, worsened profits (decreased tire production) 	Medium to high	
		Temperature rises	Deterioration of roadsReduced areas of snowfall	 Increased R&D costs (heat-resistant tires) Decreased sales (winter tires) 	Medium to high	
		Sea level rises	 Reduced natural rubber harvests Compromised ports and warehouses 	 Increased raw material prices (natural rubber) Decreased sales (reduced or suspended tire production) Inventory/product damage (flood damage) 	Medium to high	
	Acute	Increase in extreme weather	Compromised infrastructure networks	 Decreased sales and profits (overall business slowdown) 	Medium to high	
			Frequent and severe heavy rainfall	 Transport network disruption, loss of commuting options Flooding of natural rubber plantations 	 Decreased sales, worsened profits (revision of production plans) Increased raw material prices (natural rubber) 	Medium to high
				Increase and intensification of tropical cyclones	Marine transport delays, accidents	 Increased transport costs Inventory/product damage
Transition	Policy	Introduction of carbon pricing	 Increased service prices as costs are passed on Introduction of carbon border tax Introduction of environmental taxes to auto-related exports 	 Increased distribution costs Increased costs of R&D and equipment investment (shift to low-carbon products) Worsened profits (tariffs) Increased costs for purchasing carbon credits 	Medium to high	
	Market/ reputation	Increased raw material costs	 Fewer rubber plantations due to poor profitability 	 Increased raw material prices due to decreased natural rubber production 	Medium to high	

(Financial impact and countermeasures)

1. Impact of changing climate patterns on the procurement of natural rubber [risk]

Climate-related events/ financial impact on business	Impact amount/ impact timing	Calculation method	Countermeasures
Changes in climate patterns Changing climate patterns will generate changes in the areas in which natural rubber plants can grow, a deterioration in quality and other issues, all of which could increase the cost of natural rubber procurement.	Approx. 0.7 to 9.7 billion yen (Medium-term: 2030)	 (Minimum) Volume of natural rubber procurement × Increase in natural rubber prices The estimated volume of natural rubber procurement for 2030 is calculated on past trends The increase in natural rubber prices is calculated by averaging out the price increase in past months of high flooding across the whole year (Maximum) Increase in natural rubber procurement cost × Percentage increase in natural rubber procurement cost s set at the same level as the increase in procurement cost is set at the same level as the increase in procurement cost in procurement cost in years when large-scale flooding occurred The percentage increase in natural rubber procurement cost in years when large-scale flooding occurred through to the year when large-scale flooding occurred through to the year 2030 	 Reduce the amount of natural rubber used in each tire by seeking to reduce tire weight while also paying due attention to reducing rolling resistance Continue efforts to increase the usage of sustainable raw materials and reduce consumption of natural rubber by gradually introducing products made from recycled raw materials such as recycled rubber from used tires Achieve stable natural rubber procurement by encouraging the entire supply chain to build solutions to issues faced by natural rubber production sites (deforestation, infringement of local residents' rights)

2. Carbon pricing mechanisms [risk]

Climate-related events/ financial impact on business	Impact amount/ impact timing	Calculation method	Countermeasures
Introduction of carbon pricing Introducing carbon pricing will boost the cost of CO ₂ emissions.	Approx. 0.5 billion yen (Medium-term: 2030)	 Shortfall in CO₂ reduction target × Carbon tax The shortfall in CO₂ reduction targets is the volume outstanding supposing the Company's targeted CO₂ volume reduction in 2030 is lower than expected by 10% The carbon tax is the 2030 carbon tax for developed countries designed to help achieve the 2050 net zero emissions target announced by the IEA The percentage increase in natural rubber procurement volume is the estimated percentage increase in procurement volume between the year when large-scale flooding occurred through to the year 2030 	 The Toyo Tire Group will continue to reduce CO₂ emissions through efficient energy use in our products and business activities inside and outside the organization Help reduce CO₂ emissions by promoting the procurement of renewable energy at production sites using internal carbon pricing (ICP), as well as fuel conversion and equipment upgrades
	Approx. 5.7 billion yen (Medium-term: 2030)	 CO₂ emissions × Carbon tax CO₂ emissions are the company's target for CO₂ emissions in 2030 The carbon tax is the 2030 carbon tax for developed countries designed to help achieve the 2050 net zero emissions target announced by the IEA 	

Highly significant opportunities

Scenario	Туре	Changes in economy and society	Impact on business	Main financial impact	
Transition Market Greater eco- conscious behavior by stakeholders Expansion of low-carbon product market Products/ services Increased environmental awareness in customers		Greater eco- conscious behavior by stakeholders	 Acquisition of new business partners through focus on the environment Increased added value of eco-conscious products 	 Increased sales and profits (acquisition of new business partners, increased added value) 	High
		Expansion of low-carbon product market	Greater demand for products to go low carbon	 Increased sales and profits (increased added value) 	High
		Increased environmental awareness in customers	 Development and sales of products with low environmental impact 	 Increased sales and profits (increased share, increased added value) 	High
	Growth of EVs/ next-generation vehicles	Growth of EVs/ next-generation vehicles	Greater demand for EV tires, early-stage development and sales	 Increased sales and profits (increased added value) 	Medium to high
	Energy	Skyrocketing coal and oil prices	Expansion of EV market	Increased sales and profits (sales of EV tires)	High

Climate-related metrics



 Introduction of an internal carbon pricing system Used to evaluate decarbonization-related projects and other investment initiatives. Following a trial operation in fiscal 2023, the system was officially launched in fiscal 2024 with a set carbon price* of 10,000 yen/ton.

*The appropriateness of the carbon price will be assessed each year and revised if necessary.

Introduction Top Message Vision Strategy

main III Risk management

Climate-related targets

GHG emissions reduction targets

*Decided by the Sustainability Committee in November 2021 and approved by the Executive Committee in December 2021 *Announced on February 15, 2022

Scope1, 2	GHG emissions: Reduce GHG emission by 46% by 2030 compared to 2019 and aim to achieve carbon neutrality by 2050.
Scope3	GHG emission per unit: Aim to help reduce GHG emissions per tire in 2030 by 20% compared to 2019.

One of our milestones is to aim to reduce Scope 1, 2 GHG emissions by 25% by 2025 compared to fiscal 2019

Reducing greenhouse gas (GHG) emissions

Greenhouse gas emissions are seen as a major cause of climate change so the Toyo Tire Group is working to reduce GHG emissions through its products and business activities inside and outside the organization.

Scope 1, 2 initiatives

The amount of energy consumed increases in line with increases in production volume. However, as a means of addressing Scope 1, 2 emissions, we are seeking to reduce energy consumption at our production bases by repairing process pipelines and introducing highly efficient equipment to improve energy efficiency, and also by encouraging automation and improving the usage of air-conditioning and lighting. In addition, we are switching to fuels that emit lower greenhouse gases. We have reduced CO₂ emissions from the Sendai Plant by 500 tons a year in 2023 by strengthening the insulation of the plant's vulcanizers and pipelines and thereby reducing energy consumption. Furthermore, we converted the boilers at the Kuwana Plant to natural gas, reducing CO₂ emissions by 1,400 tons. By introducing nitrogen vulcanization and installing inverters on vacuum pumps at tire manufacturing subsidiaries in China, we have reduced CO₂ emissions by 1,600 tons annually.

Meanwhile, our plants in Japan are promoting the use of electric forklifts. Purchased electricity at our Japanese plants is being replaced by electricity derived from renewable sources in, and the electrification of 17 forklifts in 2023 helped reduce CO2 emissions by 400 tons.

Expanding the use of clean energy

From the second half of 2022, the Toyo Tire Group began switching electricity purchased primarily at production sites to power derived from renewable sources. By the end of 2023, 100% of the electricity purchased at the Sendai Plant, the Kuwana Plant and our tire plant in the United States had been converted to renewables, along with our administrative and technical bases in Japan. We will systematically promote efforts to achieve a global 90% renewable energy usage ratio by 2030. That ratio stood at 71.14% at the end of 2023.

We are also actively introducing photovoltaic (PV) power generation systems for in-house use. The largest PV power generation system in Serbia (power generation capacity: 8.4 MW) was installed on the premises of our Serbia Factory, which launched operations in 2022. The system's annual generation of 10,150 MWh of electricity is helping reduce CO₂ emission by 7,100 tons a year. By the end of 2023, a large-scale PV power generation system with a generating capacity of 14.0 MW installed on a 96,000 square meter rooftop space in our tire plant in Malaysia was fully operational. The system is expected to generate 19,000MWh and reduce CO₂ emissions by approximately 12,000 tons per year.

Meanwhile in Japan, at the end of 2023, we introduced a solar power generation system at our Corporate Technology Center. The system generates approximately 419 MWh each year, which is more than any other system at any other base in Japan, and is equivalent to approximately 12% of the electricity used at the Center. The system is expected to reduce CO2 emissions by approximately 128 tons per year.





Tire plant in Malaysia

Corporate Technology Center

Scope 3 initiatives

The Toyo Tire Group aims to contribute to a 20% reduction in Scope 3 GHG emissions per tire by 2030 compared to 2019. A calculation of GHG emissions throughout the Group's value chain based on the Japan Automobile Tyre Manufacturers Association's (JATMA) Tyre LCCO₂ Calculation Guidelines Ver. 3.0.1 revealed that emissions from the Category 11 product use phase account for at least 80% of overall GHG emitted. According to the guidelines, fuel-efficient tires can reduce CO2 emissions during use (during vehicle driving) by 95.4 kg CO2e per tire for passenger car radial (PCR) and 879.0 kg CO₂e per tire for truck and bus radial (TBR) compared to standard tires. Our technical division is working to develop technologies to enhance fuel efficiency of tires by reducing their rolling resistance and weight. Over the medium to long term, the Group is planning to enlist the help of the Product Planning Division in

upgrading fuel efficiency performance each time we change a tire model. As of 2023, emissions from PCR had been reduced due to reduced rolling resistance by 1.5%*1 compared to 2019, which is a reduction of 94.8 thousand tons-CO2e.

*1 Calculation method: The weighted average RRC for each business year is calculated from PCR sales and the RRC for each product, and CO₂ emissions are estimated based on JATMA's Tyre LCCO2 Calculation Guidelines Ver. 3.0.1.

Energy consumed





(thousand t-CO2e)

Greenhouse Gas (GHG) emissions

[Scope1, 2]

		(1100	
	2021	2022	2023
Total Scope1 GHG emissions	268.2	265.3	274.5
Total Scope2 GHG emissions (location-based)	284.4	253.6	280.5
Total Scope2 GHG emissions (market-based)	_	_	105.8

GHG emissions (Scope 1) GHG emissions (Scope 2)

Emissions intensity is total volume from Scopes 1, 2 divided by total sales Scope2 is calculated on a location-based method until 2022 and on a market-based method from 2023.

(thousand t-C 800.0	O2e)				(t-CO2/millions of	f yen) — 4
600.0	590.9	535.5	552.6	518.9		— 3
400.0	296.3	_263.9_	268.2	265.3	380.3	- 2
200.0	1. ³ 294.6	57 1.8 271.6	284.4	40	04 0.69	— 1
0 ——	2019	2020	2021	2022	105.8 2023 (FY)	—0

Energy consumption and GHG emissions are third-party verified data.

SBTi^{*2} initiatives

In May 2024, Toyo Tire Corporation submitted a letter of commitment to SBTi stating its intention to seek SBT certification. We have already set targets for reducing GHG emissions as the Toyo Tire Group and are currently working to achieve them. We will now strengthen our efforts across the entire supply chain by setting GHG reduction targets for the periods five to 10 years ahead, that comply with the levels required by the Paris Agreement*3

*2 SBTi: The Science Based Targets Initiative is designed to achieve a goal of limiting any rise in average global temperatures to 1.5°C

*3 Paris Agreement: An international agreement formed at the Conference of the Parties to the United Nations Framework Convention on Climate Change held in Paris in 2015. The long-term goal of this agreement is to keep any rise in average global temperatures to well below 2°C compared to pre-industrial levels, and strive to limit that increase to 1.5°C.

Domain III Risk management

Supply chain

Our policy

The Toyo Tire Group has established the Toyo Tire Group Basic Purchasing Policies and seeks to secure appropriate product quality and price through fair transactions.

We also formulated the Toyo Tire Group CSR Procurement Guidelines and the Sustainable Natural Rubber Procurement Policy. We work with our suppliers to further promote sustainable procurement that aims to mitigate, prevent and minimize the negative impact of our corporate activities on the environment and society and to improve our corporate value and competitiveness.

We also support sustainable logistics by improving the productivity and efficiency of truck transportation and ensuring safe cargo handling operations.

Organizational responsibilities (April 2024)

We established the Supply Chain Task Force under the jurisdiction of the Sustainability Committee to discuss activity themes, targets and KPIs in relation to ESG issues in the supply chain. The Sustainability Committee regularly confirms and monitors the status of these activities.

xecutive Committee



Procuring sustainable natural rubber

The securing of a stable natural rubber supply into the future is an important management issue for a business group like ours that uses natural rubber as the main raw material. The natural rubber industry is facing issues relating to deforestation at production sites and the infringement of local residents' rights. We recognize the importance of striving to solve these problems across the entire supply chain from production through consumption.

International cooperation for building a sustainable supply chain

Toyo Tire Corporation is a member of the Global Platform for Sustainable Natural Rubber (GPSNR)* launched in 2018 under the leadership of the Tire Industry Project (TIP), which is part of the World Business Council for Sustainable Development (WBCSD). As a member, we participate in discussions designed to solve relevant issues. We are working to prevent deforestation, conserve biodiversity and water resources, uphold human rights and support local communities, improve the productivity of natural rubber and make our supply chain more transparent. We also exchange information with the civil society sector, which includes NGOs and other groupings that have specialized knowledge of environmental and social issues at natural rubber production sites.

Our aim going forward is to continue to cooperate with international initiatives and stakeholders and to build a sustainable natural rubber supply chain across our whole value chain.



Global Platform for Sustainable Natural Rubber

*A platform that seeks to transcend industrial boundaries and ensure that the production and use of the world's natural rubber is carried out in a way that is more conscious of the natural environment and social issues.

Promoting sustainable procurement

Following the guidance provided by GPSNR encouraging tire manufacturers to incorporate the platform's Principles of Sustainable Natural Rubber into their business activities, we conducted a thorough review of the items related to natural rubber procurement that were determined as part of our CSR Procurement Guidelines. Then, from 2021, we strengthened our system based on the separate Sustainable Natural Rubber Procurement Policy. That policy is designed to improve the effectiveness of initiatives relating to healthy ecosystems, human rights, communities and other issues. Currently, in addition to conveying this policy to suppliers and asking for their cooperation, we are promoting activities that ensure traceability and protect the environment in accordance with the medium- to long-term action plan stipulated by our Supply Chain Task Force. In 2023, we made a donation to an international environmental organization to help protect forests. We have also set up a dedicated contact point specifically for the natural rubber supply chain. We received no reports in 2023.

Supplier management

Using guidelines to engage suppliers

We have formulated the Toyo Tire Group CSR Procurement Guidelines and request suppliers to pursue activities in accordance with these guidelines to help address environmental and social issues across our entire supply chain. We also appeal to our suppliers to help convey the purpose and nature of these guidelines further up the supply chain. The guidelines are reviewed whenever there is change in social demands or the business environment. The guidelines have been published in Japanese, English and Chinese.

To ensure the fair and objective assessment of supply chain risks, we formed a contract with EcoVadis, a third-party organization that conducts CSR assessments, and commissioned sustainability assessments of our suppliers from an environmental and social perspective from 2022. By the end of 2025, we aim to have fully audited suppliers accounting for 95% or more of the total transaction value of our tire-related raw materials. At the end of 2023, we had finished evaluating suppliers that account for approximately 70% of that total transaction value, including natural rubber suppliers.

Going forward, we will promote engagement with suppliers based on the results of the EcoVadis assessments and work together to solve supply chain issues.

Responding to conflict minerals risks

Conflict minerals response

In Europe and the United States, manufacturers are legally obliged to conduct due diligence when purchasing conflict minerals (tin, tantalum, tungsten and gold) and cobalt mined in conflict and high risk areas in light of the fact that the money from such purchases may be used to fund local armed groups and promote corrupt practices, such as human rights infringements, bribery and money laundering. When procuring minerals and raw

Efficient logistics

As the shortage of truck drivers grows ever more serious in Japan, the Ministry of Land, Infrastructure, Transport and Tourism is developing initiatives to improve the productivity and efficiency of truck transportation and create more comfortable working environments.

To promote efficient logistics, Toyo Tire Corporation is instigating a modal shift to ships and national railways for the long-distance transportation of goods in Japan dispatched from our factories. We have already shifted over 50% of transportation to these new modes, and, ten years from now, we aim to have reduced long-distance truck transportation to roughly half of 2022 levels. Furthermore, ensuring safer and more efficient cargo handling operations will not only reduce the burden on drivers, but will also fuel economic growth and create higher levels of job satisfaction. With regard to our decarbonization initiatives, we have been surveying existing suppliers since 2021 and are tackling any issues that emerge to help reduce the environmental impact of our supply chain activities.

Fair and transparent transactions

We declared our commitment to free competition and fair trading in each market in the Toyo Tire Group Code of Conduct. We conduct our activities in compliance with antimonopoly and subcontracting law, pursue fair procurement activities, comply with import and export-related laws and regulations, and ensure appropriate labeling and product explanations.

For instance, the Group seeks to ensure business activities are based on fair and free competition by establishing purchasing regulations that stipulate the thorough implementation of fair and non-discriminatory business dealings and prohibit the development of personal interests with suppliers. At Toyo Tire Corporation, we have established anti-cartel regulations to prevent cartels and bid-rigging activities. In addition, we continuously perform self-inspections regarding compliance with subcontracting law and implement e-learning programs on the law.

materials mined and manufactured in such areas, the Group's policy is to ensure those materials are not linked to human rights violations, environmental destruction, conflict, or corruption, and we enlist the cooperation of suppliers to trace back to the smelters and confirm that the raw materials purchased by the Group are not linked to any such inhumane acts. We would request remediation through our suppliers if any such concerns were to emerge.

Specific initiatives

- Introduced and expanded large container transportation by Japan Freight Railway Company for shipments from Sendai Logistics Center and Kuwana Logistics Center, and introduced coastal vessel transportation using shipping containers from the Kuwana Logistics Center
- Installed safety fences in warehouses at our Sendai and Kuwana Logistics Centers following a risk assessment (to prevent tire racks from toppling or items from falling in the event of an earthquake)
- Installed monitoring cameras at logistics centers in each plant and distribution centers in Japan to ensure safe operation; installed monitoring cameras to ensure safe forklift operation

main III Risk management

Quality WEB

Our policy

Our principle for manufacturing is to provide high-quality and safe products and services that are useful to society, and we state our basic policy for product quality and code of conduct in the Toyo Tire Group Global Product Safety Policy. The policy clearly states that product safety and global environmental protection must be taken into consideration throughout the value chain, from the product planning, development and design stages to production, sales, use and after-use.

We operate a quality management system based on IATF 16949 (or ISO 9001 at some production sites) predominantly

- at our production bases, and take measures against risk.
- -ISO 9001 certification (as of the end of March 2024)
- Production bases: 13 sites (3 Toyo Tire Corporation sites*, 10 affiliated company sites)
- Sales bases (affiliated companies): 2 sites
- *The Kuwana Plant has independently acquired certification at two sites: its tire production plant and automobile parts plant.
- -IATF 16949 certification (as of the end of March 2024)
- Production bases: 9 sites (3 Toyo Tire Corporation sites, 6 affiliated company sites)

Organizational responsibilities (April 2024)

Quality Assurance, Environment & Safety Headquarters is responsible for promoting initiatives in this area, and reports progress to the Sustainability Committee.



Improving product quality

Meeting the quality standards of each country

In the face of factors such as greater climate change risks, many countries are rapidly introducing new regulations related to the environmental performance and quality of vehicles to promote higher fuel efficiency and reduce the CO₂ emissions. We are working to strengthen our response to guality standards throughout the Group to ensure we comply with the increasingly complex quality-related regulations in each country.

Our tire and automotive parts businesses each hold annual Global Quality Management Committee (Global QMC) meetings, bringing together quality assurance managers and relevant representatives from manufacturing bases worldwide to share and discuss each site's initiatives related to product quality, improvement of quality assurance systems for production, and quality-related demand of our business partners.

In addition, at the four tire testing and evaluation sites in Japan, we test our tires in compliance with ISO/IEC 17025 (general requirements for the competence of testing and calibration laboratories) since our initial certification in 2013, and have been working to improve test accuracy and reliability to continue conducting tests in accordance with standard requirements.



Example Efforts to Meet Quality Standards

- Collecting information locally
- Making recommendations by participating in industry groups
- Exchanging opinions with regulatory institutions
- Sharing information on the latest legal and regulatory trends
- Giving presentations on legal and regulatory matters

Increasing customer satisfaction

Improving quality and customer satisfaction

As a manufacturer, we understand that our products and services link us to both our customers and society, and we are working to improve quality throughout the entire value chain. Our production bases are constantly searching for ways to maintain and improve product quality while our technical service departments continuously investigate product satisfaction levels in the market and relay customer requests as feedback to our design and production bases. Our Customer Relations Department analyzes the opinions and inquiries received from customers on a day-today basis and makes recommendations to the relevant departments in order to improve our products and services. Other workplaces also strive to provide services and improve the quality of our operations from a customer perspective. Such activities reflect the spirit of our Company Philosophy of continuously improving our products and creating value for everyone who we work with.

Visualizing manufacturing quality using manufacturing execution systems (MES)

The Toyo Tire Group aims to build a quality assurance system that can predict and prevent issues from occurring in the manufacturing process. We have introduced automatic measuring instruments into the tire manufacturing process, and are launching a system that digitally collects and visualizes qualityand production-related information from production equipment. This will ensure quality in each manufacturing process, and make

Improving service quality at sales companies

The Group's tire sales subsidiaries are striving to improve the job skills of tire technicians and the level of service provided by sales associates and front office staff. Sales companies provide jobspecific training to sales associates and front office staff to equip them with the awareness required to convey product value to customers clearly and correctly on a day-to-day basis and to develop the skills required for their respective roles.

We also hold a Truck and Bus Tire Servicing Contest for technicians, at which technicians selected from all over Japan compete with each other to demonstrate their skills. The primary

Tire safety awareness activities

We believe that one of our most important duties is to help drivers learn how to use tires appropriately. Using our proprietary driving simulator, we offer a workshop for driver to experience the difference between worn and new tires when breaking on wet roads or getting a puncture, and maneuverability under different tire pressures. During the 2023 spring and autumn National Traffic Safety Campaigns, we ran a workshop in collaboration with the police station nearest the venue. Approximately 4,200 people

For more than 50 years, the Group has continuously held quality control (QC) circle activities to proactively raise quality control standards using employee insight from the frontlines. QC circle activities began at production sites and have now spread to sales divisions, with about 300 circles currently running within the Group. In each circle, members pool their experience and knowledge in order to solve problems, and work to improve quality by grasping the current conditions, setting goals, developing action plans, and analyzing issues. Each year, we run a Toyo Tire QC Circle Convention, at which circle representatives from Japan and overseas come together to learn from each other by giving presentations on not only quality improvement initiatives but also their day-to-day efforts to eliminate workplace waste and loss. Moving forward, we will continue supporting QC circle activities to further improve worksite autonomy and customer satisfaction.

it possible to analyze and monitor collected data to detect changes in process trends. At the Serbia Factory, MES will be put into operation in the second half of 2024 and expanded to the quality area. Analyzing the results, we are working to introduce MES at other production bases, as well as foster data-centric talent and corporate culture.

goal of the contest is to improve the skills and service level of technicians responsible for exchanging tires, performing inspections, and providing after-sales services. This contest

illustrates to staff how their own jobs contribute to the safety of our customers, which in turn fosters a sense of duty and motivation toward their work



have taken part in the workshop over the five-year period starting in 2019. We confirmed the effectiveness of the workshop with

97% of post-workshop

questionnaire respondents indicating that their awareness of tire safety has increased.



A participant using the driving simulator