# Yokohama Rubber's **Important Issues**



### **For the Global Environment**

We challenge to build a sustainable society in harmony with the environment, to protect our blue planet and human



The environment





### **Together with Local Communities**

We build a trusted identity as a contributing member of the global community by making contributions to the development and prosperity of local

Organizational governance

Community involvement and development





### **Together with Our Customers**

We supply safe and secure products through manufacturing focused on our passion and technology.

Organizational governance

Consumer issues





### To Our Stakeholders and Investors

We improve our company value by growing business opportunities.

Organizational governance





### **Together with Our Business Partners**

We promote CSR activities throughout the value chain.3

\*The overall series of activities or stakeholders providing or receiving products or services.



🔒 Human rights 😘 Labour practices

Fair operating practices





### Together with **Our Employees**

We value and develop our people, and





Cabour practices

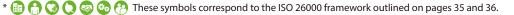














# Development of ultra-wide base (UWB) single tires that help alleviating the environmental impact by large commercial vehicles

Since 2011, Yokohama Rubber has been rolling out ultra-wide base (UWB) single tire products in the North American market that make a positive contribution towards improving the transport efficiency and fuel economy of large commercial vehicles such as buses, trucks and tanker trucks.

Conventionally, these types of large vehicles have been fitted with sets of dual tires (two tires positioned adjacent to each other) in order to fully support the weight of the vehicle and its cargo or passengers. Yokohama Rubber's UWB single tires are nearly as wide as two conventional tires, so just one of these tires can support the load of a large commercial vehicle that used to require two tires. UWB tires have a very low aspect ratio.

Switching over to UWB single tires offers many benefits. For one thing, the overall weight of the vehicle itself is reduced. In the case of the eighteen-wheeler tractor-trailers that are the most common type of long-distance truck in the U.S., using UWB single tires instead of dual tires can reduce overall vehicle weight by around 200 kilograms.

A vehicle's maximum load capacity is determined by the vehicle's shape and size; it cannot carry more than this maximum capacity. By making the vehicle itself lighter, you can increase the size of the load that it can carry. A UWB single tire requires less space to install than a set of dual tires; this means that a vehicle equipped with UWB single tires can not only carry heavier cargo, it can also carry cargo that occupies a larger volume of space.

Being able to carry more cargo at one time makes for improved transport efficiency, which reduces transport costs and also minimizes the impact on the environment. The use of UWB single tires also reduces rolling resistance by around 10–12%, making it possible to achieve significant improvements in fuel economy. All of Yokohama Rubber's UWB single tire products have received SmartWay® certification, which is awarded under the U.S. Environmental Protection Agency (EPA) SmartWay® program for evaluating products that make a contribution towards reducing the environmental burden of commercial transportation.

In addition, the amount of materials needed to manufacture one

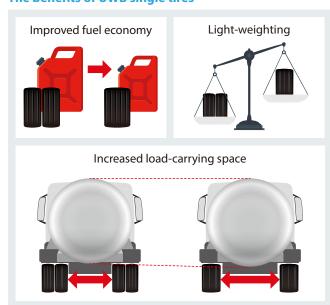
In addition, the amount of materials needed to manufacture one UWB single tire is much smaller than the corresponding amount for a set of dual tires, so the adoption of UWB tires also helps to save resources.

While UWB single tires do offer all of the benefits outlined above, because the tire's section width is greater in relation to its section height, a very heavy load is placed on the tire belt, and conventional

tire construction methods cannot provide adequate performance. To overcome this problem, Yokohama Rubber developed SPIRALOOP tire belt structure technology, which optimizes materials, sizing, alignment and manufacturing processes. This patented technology has made it possible for Yokohama Rubber to undertake mass production of UWB single tires.

In the North American market, where long-distance road transportation is highly developed, UWB tires accounted for 3.9% of the total demand for large commercial vehicle tires in 2016, and this figure is forecast to grow in the future. Currently, UWB single tires account for just under 10% of Yokohama Rubber's total tire production; given that demand for this type of tire is expected to increase in Japan as well in the future, Yokohama Rubber's UWB tires can be expected to start making inroads into the Japanese market too.

### The benefits of UWB single tires





## We challenge to build a sustainable society in harmony with the environment, to protect our blue planet and human beings.

### < Our Goals >

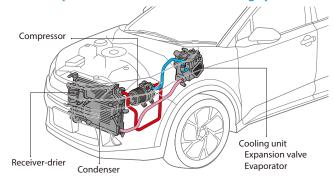
- To make all of our products environmentally friendly
- To reduce the total amount of greenhouse gas (GHG) emissions (to 50% less than 2005 levels across the value chain)
- To promote the efficient use of water resources according to the characteristics of water risks
- To develop biodiversity conservation activities at production sites

# Ongoing improvement of air-conditioning hoses that support next-generation air-conditioning refrigerant

A car's air-conditioning system, which is an indispensable part of the vehicle, creates cold air using vaporization heat generated by a continual cycle of alternating liquefaction and gasification (through the application of pressure) of refrigerant inside hoses located within the air-conditioning system in the engine compartment. In recent years, there has been a worldwide movement towards tighter regulation of the types of refrigerant used in air-conditioning systems, with the aim of helping to prevent global warming. Starting from 2017, it will be obligatory for all new cars sold within the European Union to use air-conditioning refrigerant that has a Global Warming Potential (GWP) of no more than 150. Similar regulations are expected to be introduced in North America and Japan in the future. Responding to this trend, Yokohama Rubber has launched the "AC6B 11" high-pressure hose, which is designed to support the new-generation HFO-1234yf air-conditioning refrigerant to which car manufacturers are starting to switch over. HFO-1234yf has a very low GWP of just 4, compared to a GWP of 1,300 for traditional air-conditioning refrigerants. However, when HFO-1234yf is used in conventional air-conditioning hoses under pressure, it can be dangerous because it may lead to the release of acid that can cause cracks to develop in the inner resin of the hose. The new "AC6B 11" hose uses a new type of resin that has been specially developed by Yokohama Rubber, and features improvements to the outer rubber layer and to the fibers of the reinforcement layer, which successfully prevents the problem with acid.

Yokohama Rubber has also developed an improved version of the new hose that enhances the durability of the hose two-fold. Additional improvements include the adoption of softer resin to prevent vibration from the compressor from being transmitted to the passenger compartment, improvement of the high gas-permeability resistance layer that prevents gasified refrigerant from escaping from the hose, etc. By improving all three layers of the hose—the rubber layer, resin layer and reinforcing layer—Yokohama Rubber has succeeded in enhancing overall hose functionality across the board in line with users' requirements. In the future, we will continue to undertake further R&D in this area with the aim of meeting the differing needs of individual automotive manufacturers and individual models with greater precision.

#### Main components of a car air-conditioning system





### **VOICE**

## The manager who heads Yokohama Rubber's UWB single tire sales division

Yokohama Rubber's ultra-wide base (UWB) single tires offer many benefits. Firstly, they reduce the overall weight of the vehicle. This means that one UWB single tire can carry more load than a set of two standard dual tires, which also makes for improved fuel economy.

In addition, because UWB single tires have a larger contact patch than conventional dual tires, they provide the vehicle with enhanced running stability. Another major benefit of UWB single tires relates to maintenance and pre-trip inspections. Because none of the tires are located behind other tires, checking the air pressure and performing other inspections on UWB single tires is easier than it is with dual tires. The biggest issue with UWB single tires is retreading; in regard to this issue, Yokohama Rubber leads the way in the industry by producing UWB tires that are easier to retread than those of any other manufacturer. Reflecting the confidence we have in our products, in the North American market we offer a six-year unlimited retread guarantee.

**Dan Funkhouser**, Sr. Director of Commercial Sales, Yokohama Tire Corporation (North America)



### Yokohama Rubber (China) Co., Ltd. awards scholarships to local students

Every year since fiscal 2009, Yokohama Rubber (China) Co., Ltd. (which oversees all of Yokohama Rubber's operations in China) presents "Yokohama Scholarships" to academically outstanding students at Qingdao University of Science and Technology in Qingdao City, Shandong Province. In fiscal 2016, nine students received these scholarships.

Qingdao University of Science and Technology is a Key University\* that is administered directly by Shandong Provincial Government, and has a highly-regarded polymeric materials program.

The Yokohama Scholarships are awarded to students in their second, third or fourth years at Qingdao University of Science and Technology. There are three classes of scholarship: second-year students receive between 1,500 and 6,000 Yuan, third-year students receive between 2,000 and 8,000 Yuan, and fourth-year students receive between 5,000 and 10,000 Yuan. Every year, scholarships totaling at least 50,000 Yuan are awarded.

Yokohama Rubber (China) Co., Ltd. has implemented measures to ensure that the company is run in harmony with the local community, for example by proactively recruiting local talent, and by providing sponsorship for a conservation project in the Laojunshan district of Yunnan Province. The Yokohama Scholarships program forms a part of

these activities. By providing financial support for outstanding local students, this program helps to raise awareness of Yokohama Rubber among people in the area, and the program is also expected to help Yokohama Rubber (China) Co., Ltd. recruit talented graduates. While the number of people recruited varies from year to year, in fiscal 2016 Yokohama Rubber (China) Co., Ltd. recruited a total of 37 local inhabitants, including graduates of Qingdao University of Science and Technology. While the number of scholarship recipients who subsequently go on to join the company has so far been limited, Yokohama Rubber is still proud to be able to make a contribution towards the cultivation of human talent in the region. By providing support for young people through community contribution activities of this kind, Yokohama Rubber (China) Co., Ltd. is aiming to strengthen awareness of Yokohama Rubber within the local community. In the future, we will continue to proactively undertake community contribution activities, including the provision of support for educational institutions.

\* Key University: In China, universities that are outstanding in a particular field(s) are designated as Key Universities by the government, and receive priority in the provision of government funding support. Both public and private universities are eligible for designation as Key Universities.



### VOICE

### A student who has received a Yokohama Scholarship

I would like to express my sincere appreciation for the support that Yokohama Rubber has given to our university and to its students.

I was born in a small village in Shanxi Province. My parents were not wealthy, but they brought me up with love and care.

I firmly believe that studying hard is the only route to success.

Receiving this scholarship is a great honor for me. I am determined to acquire as much specialist knowledge as I can during my time in university, and then go on to accumulate practical experience in society, so that I can build solid foundations for my future career and live up to the expectations of my parents, my teachers, and everyone else that cares about me.

I hope that all of the students who have benefited from the support provided by Yokohama Rubber will be able to enjoy healthy, successful lives in which they can fulfil their dreams, and that in doing so they will also be making a contribution to the continued development of Yokohama Rubber. Thank you!

**Liu Xiliang**, Class 134, Rubber Science Division, Qingdao University of Science and Technology



We build a trusted identity as a contributing member of the global community by making contributions to the development and prosperity of local communities.

### < Our Goals >

 Making contributions to local community development by engaging with the community, with a focus on the Forever Forest Project (a 500,000 tree-planting project)

### Making a positive contribution to society through collaboration with Chelsea FC

Following the signing of an Official Partner agreement between Yokohama Rubber and English Premier League football club Chelsea FC, Yokohama Rubber has been providing support for the Chelsea Foundation. The Chelsea Foundation is actively involved in using sport as a way to undertake socially-beneficial activities at the community level.

The Chelsea Foundation's core activity is the holding of soccer schools for young people. These soccer schools are held in a wide range of different locations: at the invitation of Yokohama Rubber, for the 2016–2017 season the Chelsea Foundation arranged for its coaches to provide soccer schools for local children in locations near Yokohama Rubber facilities in various parts of the world, including Qatar, several locations in Russia (including Moscow), and several locations in the U.S.A. Around 50 children are able to participate in each soccer school. Besides providing the opportunity to learn some of Chelsea's first-class soccer skills, the schools also help children to develop a positive outlook on life. Chelsea FC soccer schools are often the subject of reports in local media, and so this collaboration

with the Chelsea Foundation has also helped to raise Yokohama Rubber's international profile.

Yokohama Rubber is also providing support for New York football club FC Harlem through our collaboration with Chelsea FC. FC Harlem uses a range of football-based activities to keep children from low-income households from getting involved in drugs and crime.

In the U.K., Yokohama H.P.T. Ltd. (YHPT) has also collaborated with Chelsea FC on an awareness-raising initiative that makes use of short films reminding people of the importance of vehicle safety inspections (featuring players from the Chelsea Ladies team) which are shown on the main display screen after matches at the Chelsea FC Stamford Bridge ground, as well as tire safety information printed on the back of football match programmes. This initiative has been very well-received, and has been awarded the Tire Safety Association Award from TyreSafe, a British NPO. Yokohama Rubber will continue to collaborate with Chelsea FC in the future, endeavoring to make a positive contribution to both tire safety and local communities.



Meeting with children from all over the world who have participated in Chelsea Foundation soccer schools



Soccer school at FC Harlem in the U.S.A



# Bringing together a broad spectrum of new technologies to develop the "tires of the future"

In September 2017, Yokohama Rubber launched the "iceGUARD iG60", a new product under our iceGUARD brand of studless tires designed to provide enhanced safety when driving on winter roads. As befits a product introduced in 2017, the final year of implementation of Yokohama Rubber's GD100 medium-range management plan, the "iceGUARD iG60" is a truly superb studless tire that incorporates all of our company's latest technologies. The last few years have seen significant changes in road conditions due to the increasingly widespread adoption of snow-clearing technology and the impact of rising temperatures; there has been growing awareness of the need for studless tires to provide outstanding performance not only on ice but also on wet roads. "iceGUARD iG60" added good performance in wet conditions and superior noise reduction to the existing key strengths of the iceGUARD brand: first-class performance on icy roads, long-lasting high performance, and improved fuel economy. "iceGUARD iG60" achieves this through the adoption of a unique asymmetric tread pattern and the use of a newly-developed "Premium Absorptive

The new tire tread pattern improves grip on ice through effective use of the edge effect on the inner side of the tire and through enhanced traction, while greater stiffness makes for smoother handling.

The new "Premium Absorptive Compound" enhances the ability to absorb the film of water on the surface of the ice that is a major cause of cars skidding on ice, through uniform distribution of the new "Absorptive Micro Balloons". "iceGUARD iG60" also incorporates a new "Silica High Reactive White Polymer" that increases the proportion of silica in the mix and provides more uniform distribution; by strengthening adhesion to the road surface, this improves performance on both icy and wet roads.

In addition, the "Orange Oil S" that Yokohama Rubber has developed for use with studless tires helps "iceGUARD iG60" tires to maintain their flexibility and their performance on ice for a longer time.

Thanks to the adoption of these new technologies, "iceGUARD iG60" provides an improvement in braking performance on ice of 15%, and an improvement in performance on wet roads of 5%, compared to our iceGUARD iG50 PLUS . It also provides a level of performance sustainability and fuel economy comparable to iceGUARD iG50 PLUS

In the future, Yokohama Rubber and "iceGUARD iG60" will continue striving to make driving on winter roads safer throughout the world.

Yokohama Rubber's involvement in motor sports has helped to enhance our global brand visibility while also driving the development of new technologies for Yokohama Rubber tires. In the 60-year history of our participation in motor sports, we have supplied a wide range of tires for motor sport competitions, mainly under our flagship ADVAN brand.

Recently, there have been major changes in the wider social environment that have affected cars. The scope of what is expected from tire performance has expanded to include

economy—particularly in terms of fuel economy—and also how environmentally-friendly the tires are, and countries throughout the world have been formulating new regulations that tires are expected to comply with. At the same time, there is still room for improvement in other aspects of tire performance (including durability, wear resistance, light-weighting, steering control, etc.).

In the future, as the regulatory constraints on tires become ever more restrictive, Yokohama Rubber will continue to make effective use of the full gamut of our technologies to further enhance all of the functions that tires are expected to provide.





# We supply safe and secure products through manufacturing focused on our passion and technology.

### < Our Goals >

 Achievement and maintenance of zero violations of regulations and voluntary codes concerning usage of our products and services

# Providing highly reliable hoses that support offshore oil transportation throughout the world

Marine hose is one of the key products at Yokohama Rubber's Industrial Products Division, and which we hold a very high global market share. Our marine hoses play a vital role in the safe offshore transportation of petroleum. The Yokohama marine hose products are custom-made to the needs of the individual customers, carefully designed to suit the hydrographic conditions in the areas where they are used, as well as the shape of related systems, and anticipating the frequency of use.

Marine hoses are a product where reliability is vitally important, as damage can result in leakage of crude oil, and pollution of the ocean. Yokohama Rubber understands this matter and offers products with high reliability, including the industry-leading double-carcass hose, with enhanced leak detection capability. To ensure that customers can enjoy even greater peace of mind when using our marine hose products, Yokohama Rubber has obtained certification for its Seaflex marine hose products under the GMPHOM 2009 international certification framework, as formulated by the Oil Companies International Marine Forum (OCIMF). This certification requires the completion of a rigorous evaluation program, including the implementation of dynamic fatigue testing up to 25,000 times. In addition to our existing Hiratsuka Factory, Yokohama Rubber has also begun commercial production of Seaflex marine hose at its

Italian factory (through acquisition in 2014), and at its factory on Batam Island, Indonesia. Having three production facilities in different parts of the world provides Yokohama Rubber with a significant competitive advantage: we are able to supply customers from the plant that is most convenient for them in terms of logistics and delivery schedules, and we are also able to provide prompt after-sales service.

In the past few years, we have established new sales offices in Singapore, Germany and the U.S. that are functioning as hubs for the continued expansion of our marine hose business. By providing high-quality products and making effective use of the reputation of the Yokohama Rubber brand, we are demonstrating our determination to become an even bigger presence in the global market.



Dynamic fatigue testing in progress



### **VOICE**

### A marine hose customer

Due to the exposed locations of the offshore oil and gas production facilities, the transfer operations are often carried out under severer weather conditions than normally encountered at near shore applications. There is an overall requirement for extreme reliability, considering numerous factors including the cyclic loading on the hose against the constant wave action, the increased connection loads between hose sections and terminations, and additional crushing loads and bending forces being applied when the hose string is stored on a hose reel.

Having been involved in numerous projects where Yokohama hoses are used for the offloading systems of FPSO's and FSO's, I found the hoses to be of high quality and give exceptionally good performance. The construction of the hoses is robust and able to withstand the rigorous requirements imposed on the hoses. Furthermore, the Yokohama factory provides sound engineering support their products and this is helpful in the development of new concepts and systems for transferring fluid between vessels. With the industry moving towards more developments of offshore gas fields, and in particular the production of liquid natural gas, it is hoped that Yokohama can expand its hose technology to include hoses suitable for the offshore transfer of cryogenic fluids.

**Alan Hooper**, President, Promor Pte. Ltd. (an offshore oilfield engineering firm)



# Expanding our commercial tire business through the acquisition of Alliance Tire Group and of Aichi Tire Industry

One of the tire business development strategies included in Phase IV (2015–2017) of the Yokohama Rubber Group's GD100 medium-term management plan is to grow the commercial tire business. With the aim of helping to realize this goal, Yokohama Rubber acquired Alliance Tire Group B.V. (ATG) in July 2016, and Aichi Tire Industry Co., Ltd. in March 2017. Demand for commercial tires is reckoned to account for approximately 45% of total global tire demand, compared to around 55% for consumer tires; through these acquisitions, Yokohama Rubber succeeded in raising commercial tires' share of our total tire sales substantially, from 20% to 32%. Through the addition of ATG, a specialist manufacturer of off-highway tires, and Aichi Tire Industry, a specialist manufacturer of industrial tires, we are aiming to strengthen our commercial tire business by adding tires for agricultural machinery and forestry machinery and industrial tires to our product line-up. We are also making effective use of the brands owned by ATG; in May 2017, we began sales of Alliance brand tires, giving us a second passenger car tire brand which is focused on the European market. In the future, by making effective use of the respective strengths of ATG and Aichi Tire Industry, we expect to be able to realize a high level of synergy. Initially, we will be using collaboration on design and production technology to make product development and production more efficient, and then go on to reduce procurement costs and logistics costs. We will be also utilizing the respective management resources of Yokohama Rubber, ATG and Aichi Tire Industry to achieve stronger growth and enhanced earnings performance in the tire business as a whole.

ATG is a multinational corporation with production locations in India and Israel and with strong brands and extensive sales networks in

the European and North American markets. Rapid decision-making and brisk organizational management are key characteristics of those firms that succeed in achieving high growth and superior earnings performance in global markets. Particularly with respect to management, these firms tend to have a corporate culture that encourages all managers to keep costs and financial performance in mind all the time when performing their duties.

In the future, the Yokohama Rubber Group will be striving to take full advantage of the marvelous opportunity presented by the

advantage of the marvelous opportunity presented by the acquisition of ATG, working proactively to incorporate a multinational-style organizational structure and organizational management methods oriented towards achieving rapid growth in global markets into the operations of the Group as a whole.



Technology exchange in progress

### Four strong brands



- A long-established agricultural machinery tire brand, originating with a company founded in Israel in 1950
- Has a product line-up with more than 1,000 different products and sizes
- Has a strong presence in the European market



- Has been heavily focused on tires for construction vehicles since the 1970s
- \*Has a strong presence in the North American market



- Mainly produces tires for use on forestry and mining equipment
- Has a strong presence in the North American market



Japan's leading industrial tire brand



# We improve our company value by growing business opportunities.

### < Our Goals >

• Continuous improvement of corporate value and an identity that is trusted by all stakeholders.

### A global network of R&D facilities

By focusing on creative effort, practical application, and composite technologies, Yokohama Rubber has taken up the challenge of exploring the potential of rubber polymer technology and various other technologies.

Our materials research includes not only research on rubber compound tire materials, but also the creation of a wide range of new materials, including metals, aramid fiber, carbon fiber and plastic materials. These materials are utilized in the development of products that make effective use of their material properties across a wide range of industry sectors, including tires, industrial products, aerospace products and sporting goods.

In our tire business, to ensure that R&D activity is carried out close to our major markets, we have established tire R&D centers in North Carolina in the U.S. and in Thailand, and the Yokohama China Technical Center in Zhejiang Province, China. These facilities conduct a wide range of activities, from raw materials testing and evaluation through to quality assurance. At these R&D centers, products are assessed from multiple perspectives, contributing to the development of next-generation technologies.

Given that tires play a vital role in safeguarding people's lives, it is vitally important that we carry out practical evaluation from a safety-oriented, human-centric perspective. Yokohama Rubber has established the Tire Test Center of Asia in Thailand, which functions as the Group's main tire testing track, and also the Yokohama Test Center of Sweden, a dedicated winter tire testing track. At these test tracks, testing is carried out repeatedly using real vehicles, so that we

can use human evaluation as a basis for continuing to create the kind of tires our customers want.



The Tire R&D Center in North Carolina, U.S. (located on the Charlotte campus of the University of North Carolina)



Tire Test Center of Asia

### **Corporate Governance**

In fiscal 2016, Yokohama Rubber worked to achieve a further strengthening of corporate governance. One important measure that was implemented was the inclusion of external directors as members of the Personnel/Remuneration Committee for Corporate Officers and Directors, with the aim of helping to ensure transparency and fairness in regard to personnel and compensation issues relating to directors and corporate officers. An Outside Directors Committee was also established, with a membership consisting solely of outside directors (Outside Directors and Outside Audit & Supervisory Board Members), with the aim of fostering the exchange of ideas and building of consensus among external

directors; it is intended that the Outside Directors Committee will continue to meet twice a year.

With regard to the effectiveness of the Board of Directors, in 2017 an evaluation survey was implemented, targeting all directors (with the exception of the Chairman of the Board), including external directors. The results obtained in this survey were presented at a Board meeting, so that the issues identified could be shared will all Board members. On the basis of the views and opinions expressed in this survey, we will be working to further improve the functioning of the Board of Directors in the future.



### Holds MB Business Supplier Quality Coordination Meeting to enhance product quality

Yokohama Rubber's MB Group currently purchases component parts from approximately 200 suppliers, as well as engaging in transactions with a large number of processing service providers and other outsourcing partners.

We are committed to ensuring that our customers can continue to enjoy a stable supply of high-quality MB products, and we are collaborating with our suppliers to strengthen our ability to respond effectively to quality issues.

As part of these efforts, since fiscal 2015 we have been holding annual Supplier Quality Coordination Meetings, at which the suppliers of all four of the MB Group's divisions are invited to meet together with other manufacturing industry professionals to share ideas for raising the overall level of quality awareness. The scale of the Supplier Quality Coordination Meetings has expanded over the years; the third Supplier Quality Coordination Meeting held in April 2017 was attended not only by Yokohama Rubber managers working in quality assurance and procurement related areas, but also by key corporate officers and all four division heads from the MB Group, as well as by the heads of technology and production related divisions, for a total of around 50 Yokohama Rubber managers attending. At the Meeting, Yokohama Rubber managers gave presentations on the company's business strategy, quality, and CSR, and representative of two suppliers gave presentations on case studies of improvements that they have made. In addition, awards were presented to outstanding suppliers, and there was a party for participating suppliers, which helped to strengthen ties between those attending the Meeting. Besides the holding of the Supplier Quality Coordination Meeting, we have also been asking suppliers to submit quality-related self-inspection result reports, and have been strengthening the conducting of on-site auditing operations on suppliers' premises. These quality audits are preventive activities that make use of a checklist formulated by analyzing the causes of past quality issues; Yokohama Rubber is continuing to visit the production sites of all suppliers on an ongoing basis. By deepening the level of direct communication between suppliers and Yokohama Rubber quality personnel, we are able to foster mutual understanding with regard to the issues affecting our respective companies and appropriate strategies for resolving these issues. By comparison with the situation in fiscal 2014 (prior to the introduction of these measures), we have achieved a substantial reduction in the number of defective products attributable to failings by suppliers. In the future, we will continue working closely with our suppliers to enhance quality standards still further.



### **VOICE**

### **Suppliers' comments (Extracts)**

- I have attended all of the Supplier Quality Coordination Meetings so far, and they get better every time. At the most recent Meeting, we were able to develop a good understanding of Yokohama Rubber's overall strategy for quality management, and build consensus. I hope that in the future the Meetings will also include an explanation of Yokohama Rubber's procurement strategy.
- We were able to develop a thorough understanding of what kind of safety, quality and environmental measures Yokohama Rubber is implementing in line with the major trends affecting the automotive manufacturers, etc., and an understanding of the importance of ISO and other management activities. It would be very helpful if Yokohama Rubber could provide suppliers with support for securing quality-related certification.
- Listening to the case studies of improvement efforts brought home to us just how much hard work has gone into these initiatives at the production facilities, and these case studies provide a useful reference for us to develop similar measures in our own facilities. I hope that Yokohama Rubber will continue to include these case study presentations at the next Meeting.
- It would be good if we had more opportunities to develop closer communication with divisional managers, so as to help us improve the quality of the products that we deliver. I hope that Yokohama Rubber will try to put the necessary contact windows and measures in place in the future.

### We promote CSR activities throughout the value chain.

### < Our Goals >

CSR activities in collaboration with our partners

### Natural rubber supplier survey and support for sustainable production of natural rubber

Natural rubber accounts for around one-quarter of all raw materials used by the Yokohama Rubber Group; natural rubber is a vital material for the production of our company's tires and other products. For us to be able to continue to supply customers with our company's products without interruption, it is extremely important that we are able to obtain a steady supply of natural rubber. To research the current situation, in fiscal 2016 we implemented a CSR-related questionnaire survey, which was administered to natural rubber suppliers; all suppliers completed and returned the questionnaires. From the questionnaire survey results, we were able to confirm that there had been no human rights issues relating to the use of child labor or forced labor, etc. On the basis of the survey results, we are developing a roadmap for CSR-based procurement in the future, by identifying the areas where our Group's existing suppliers may be creating an environmental impact.

As part of our efforts to ensure a stable supply of raw materials and foster environmentally-friendly behavior by our suppliers, our natural rubber processing subsidiary Y.T. Rubber Co., Ltd. (YTRC) has been providing support for the adoption of agro-forestry—which involves the interspersed cultivation of ten different plant species, including natural rubber trees, bamboo, fruit trees, etc.—by farmers. YTRC employees hold seminars at which farmers can learn agro-forestry techniques, starting with the farms of employees' own family members, with the aim of gradually expanding the scope of agro-forestry implementation to include neighboring villages and Yokohama Rubber's own raw materials suppliers. YTRC donates seedlings to neighboring farmers; the farmers are then able to use

the non-rubber trees as sources of fertilizer, and obtain supplementary income from the fruit trees. Their attitudes are changing, raising hopes that rubber farms can be made more sustainable than they have been in the past.

Yokohama Rubber supports the goals of the Sustainable Natural Rubber Initiative (SNR-i) launched by the International Rubber Study Group (IRSG), and is participating in SNR-i activities. To help realize a sustainable natural rubber economy, we attend SNR-i meetings, share information with other participants, and endeavor to implement related measures within our own company.



### Adoption of a Business Continuity Plan (BCP) system linked with our suppliers

The last few years have seen a heightening of society's expectations with regard to companies' response to earthquakes and other natural disasters, and plant accidents; firms need to be able to access supplier data rapidly in the event of an incident or inquiry. To be able to respond effectively in this type of situation, in 2016 the Yokohama Rubber Group adopted a new cloud-based emergency contact system in collaboration with our suppliers, and supplier details are being updated on an ongoing basis.

The information recorded by the system includes basic company

details and contact details for key managers; the system also ensures that the chronological order of responses that have been given to inquiries can be checked. In this way, it is anticipated that if a disaster occurs or if there is an inquiry regarding CSR procurement, the most up-to-date information can be accessed on screen and this system will make it possible to respond more promptly and more appropriately.



# Working towards the creation of a more employee-friendly working environment —Establishment of the "Women's Participation and Advancement Taskforce"

With the aim of building a more employee-friendly working environment, Yokohama Rubber is implementing a comprehensive overhaul of working practices, with the introduction of new systems reflecting a variety of different perspectives.

As part of these efforts, in line with the Japanese government's implementation of the "Act on Promotion of Women's Participation and Advancement in the Workplace," in October 2016 seven-member "Women's Participation and Advancement Taskforces" were established in our head office and at each individual production site. In addition to their regular duties in the department that they are assigned to, each member of the Taskforce participates in regular discussion sessions, with full-scale activities commencing in January 2017.

Following the implementation of a questionnaire survey that was administered to all employees, individual interviews were held with every female employee, providing a direct opportunity to hear female employees' frank views and suggestions regarding the working environment. The results obtained from the survey and interviews helped to clarify how female employees approach their work, and what their hopes are regarding the creation of a more employee-friendly working environment and related systems; we were able to identify the key issues that we will need to address in order to make Yokohama Rubber a company that provides meaningful support

for diverse workstyles, including support for employees who need to balance their work with childcare or other care responsibilities. By ensuring that the Women's Participation and Advancement Taskforces' analysis of the current situation and key issues (based on examination of the questionnaire survey and interview results) is promptly shared with senior management, we are able to rapidly formulate the basic strategies needed for the creation of a workplace environment in which all employees can maximize their potential. Taking as our core strategy the goal of "Aiming to be a company that welcomes diverse workstyles, with an employee-friendly working environment that will encourage employees to stay with the company over the long term," we will be undertaking internal reforms aimed at building a workplace environment in which employees support one another, and in which every employee can fully develop their capabilities and talents, without feeling that they need to give up their career. The Women's Participation and Advancement Taskforces are currently working to strengthen coordination with Yokohama Rubber's Global Human Resources Department and IT & Management Planning Department, etc., and are implementing activities aimed at fostering an attitude to work that is free from gender bias among all employees, as well as the revision and implementation of relevant systems.

### Employment of people with disabilities that meets their real needs

In order to provide people with disabilities with a workplace environment in which they can work with maximum peace of mind, Yokohama Tire Japan Co., Ltd. (YTJ) has forged a partnership with Startline Co., Ltd., a company which helps develop satellite offices with the aim of providing employment support for disabled people. A new Yokohama Office, a satellite office providing employment for people with disabilities, was established in April 2017; four disabled persons, employed as contract employees, perform work involving HR-related data collation and inputting, etc.

YTJ has employed disabled people in the past, but they often found that even just coming into the workplace was a challenging experience; in many cases, they left the company after a short period because of difficulty in adjusting to the frenetic pace and the complex interpersonal relationships. This experience brought home to us that creating an environment in which people with disabilities can work with peace of mind is no easy task.

The Yokohama Office has staff from Startline (who possess specialist expertise in providing support for the disabled) permanently stationed there, who hold periodic one-to-one meetings with the disabled people working at the Office; the responsible Human Resources department manager is provided with feedback on a regular basis. This arrangement makes it possible to adjust the disabled employees' workload or the type of work they perform by adding a third-party opinion on the individual employee's current state of health to the discussion between the disabled employee and the Human Resources manager. It is important that disabled employees take frequent breaks so that they do not exhaust themselves by working continuously for too long; the Yokohama Office provides an environment in which it is easier (both physically and mentally) for employees with disabilities to continue to work, and enabling them to enjoy peace of mind while playing an active role. When the Yokohama Office was first established, there were

# We value and develop our people, and create opportunities for people.

### < Our Goals >

- To be an organization that allows people of diverse ages, genders, and nationalities to demonstrate their maximum capabilities
- Establishing a zero-hazard culture of safety by promoting physical and mental health
- Respecting human rights both internally and externally; no child labour or forced labour in our group or by our partners; sincerely responding to and improving complaints on human rights

concerns that having the new Office physically separate from the YTJ head office might make work-related communication difficult, and there were some teething troubles in terms of what type of work to assign to the new Office. Now, however, by holding meetings with relevant managers to decide on the appropriate workflow in advance, it has become possible for work to proceed smoothly based on procedures that are not a burden for either the disabled employees at the Yokohama Office or YTJ's head office. Through regular visits to the Yokohama Office by managers from YTJ's head office, and through information-sharing with Startline, we are able to make precise adjustments to reflect individual employees' current state of health and other circumstances, as needed.

By making effective use of the skills possessed by the employees at the Yokohama Office, we have been able to undertake data collation work that we had previously not had time to get started on at the head office. Also, getting employees to check each other's work has led to a substantial improvement in the overall quality of the work performed. We have had some very positive comments from the employees working at the Yokohama Office, such as "I had been out of the workforce for so long, and it is great to be able to work again," and "I appreciate the fact that people interact with us in a non-discriminatory way."

In the future, we will be working to further increase the

opportunities for communication between the Yokohama Office and employees at YTJ's head office, and to spread awareness throughout the company of the work results achieved by the Yokohama Office. By expanding these efforts throughout the company, we can get people to recognize the important source of human talent that disabled people represent, with the aim of expanding the scope of work entrusted to them.



The Yokohama Office

### VOICE

## Comments by people working at the Yokohama Office

- "Having regular visits from managers at YTJ's head office, who are always very friendly and polite, is very encouraging, and helps us to carry out our work with real peace of mind."
- "I very much appreciate having the Startline staff here to provide back-up for our work and health conditions."
- "I feel that, right from when I first joined the company, YTJ has made a real effort to create a disability-friendly environment, for example in terms of flexibility in working hours and being willing to accommodate time off for hospital treatment, etc."
- "This was the first time that I had taken up employment as a disabled employee, so initially I was quite nervous, but thanks to the considerate, helpful training and the weekly meetings with the Startline and YTJ staff, I have been able to work with genuine peace of mind."

### VOICE

### **Comments from a Startline manager**

Startline Co., Ltd. provides consulting services regarding workplace development and recruitment, as well as services relating to the establishment and running of satellite offices for people with disabilities.

YTJ established its satellite office in April 2017, and there are now four disabled people working there. I have been very pleased to see that, although only a short time has elapsed since then, we have already started to see progress in terms of

people being able to work longer than when they first joined the company, and people collaborating in ways that take account of the special aspects of their individual disabilities. In the future, we will continue to provide support aimed at helping the satellite office to run itself autonomously and at realizing stable, long-term employment for the people working there.

### Yasuda Satsuki,

Yokohama Center Support Staffer, Satellite Office Division, Startline Co., Ltd.

