



# Yokohama Rubber CSR Report



## Contents

Contents / Editorial Policy	01
Message from the Chairman	02
Message from the President	03
Main Products of Yokohama Rubber	05
GD2020 Medium-term Management Plan	07
Safety and Disaster Prevention Initiatives	08
CSR Slogan "Caring for the Future"	09
<b>Corporate Governance</b>	11
<b>Products</b>	13
Environmentally-friendly products	13
3R promotion initiatives	15
Initiatives to improve quality and reliability	17
<b>The Earth</b>	19
Yokohama Forever Forest activities	19
Building a sustainable supply chain	21
Initiatives aimed at saving energy and promoting the use of natural energy sources	25
<b>People</b>	27
Initiatives to foster diversified work styles	27
Creating workplace environments that make working easier for all employees	29
<b>Community</b>	31
Contributing to safety at the local level	31
Contributing to improving lives in local communities	33
Yokohama Rubber Group at a Glance / Financial Indicators	35
External Evaluation	37
Summary of Third-party Opinion	38

## Corporate Philosophy

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

## Management Policies

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

## Action Guidelines

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

## Corporate Slogan

Excellence by nature

## CSR Slogan

Caring for the Future

## Editorial Policy

The Yokohama Rubber Group is implementing measures to help solve the various problems affecting society, with the aim of realizing our corporate vision: "to build a trusted identity as a contributing member of the global community." This Report was created to share the Yokohama Rubber Group's policies, approach to CSR, orientation and performance with each of the Group's stakeholders in a concise and clear manner. More details about the Yokohama Rubber Group's CSR activities are provided on our CSR Website (which follows the GRI standards), and in our Securities Report and Annual Report; we suggest that you read these other materials in combination with this Report.

Period covered by the Report: January 1, 2017 to December 31, 2017  
(Information includes some activities which were conducted in and after January 2018)

Date of publication: November 2018 (the Report is issued annually)

\* Please note that the Yokohama Rubber Group's CSR Website is scheduled to be updated in January 2019.

# Message from the Chairman

---



In 2017, the Yokohama Rubber Group celebrated its 100th anniversary, which marked an important milestone in our development. 2017 was also the final year of implementation of the Group's Grand Design 100 (GD100) medium-term management plan, which was launched in fiscal 2006, and which has enabled us to achieve steady growth and to put ourselves firmly on the right track. Looking back over the implementation of GD100, what I am particularly struck by is how important it is to ensure that business operation provides all stakeholders with a sense of security. In addition to our high-quality manufacturing, the ESG (Environmental, Social and corporate Governance) measures that we implement in order to realize a fair, harmonious relationship with society and with the natural environment also

constitute important foundations for the Yokohama Rubber Group, and it is vitally important that we continue to implement ESG measures in the future as an integral part of core business activities.

In light of the above, in 2017 we adopted "Caring for the Future" as our CSR slogan. This phrase embodies our commitment to aiming for harmonious coexistence and mutual prosperity with all of our stakeholders – including our customers, our suppliers, local communities, and the global environment – as we move forward into the future. It is very important that "Caring" be more than just a word, but rather something that is reflected in practical, meaningful action. Given that we will be continuing with the global expansion of our business operations, the stance that we adopt in relation to CSR will be the target of ever-more rigorous scrutiny in the future.

What is especially important is that all Yokohama Rubber Group employees should think of CSR as representing an extension of their day-to-day work activities. Today, the relationship between the UN Sustainable Development Goals (SDGs) – which are a major focus of attention for the international community – and employees' activities is becoming steadily more important. We, all of us need to think about how we can contribute towards the realization of the SDGs through our work, and to recognize on a deeper level that this is something of direct personal relevance to each and every one of us. For example, there are steadily rising expectations regarding the need for environmentally-friendly manufacturing; we need to view this as more than just responding to customers' needs, but rather as a sign of major changes to come, and we need to recognize the importance of getting serious about tackling the problems affecting the global environment.

By implementing the types of actions outlined above, we will be raising awareness throughout the Yokohama Rubber Group and making steady forward progress, so that the Group can continue to enjoy the trust of society as a whole and so that we can achieve a further 100 years of continued growth.

**Tadanobu Nagumo**

Chairman and Representative Member of the Board

Message from  
the  
**PRESIDENT**



Message from the President

Entering the 101st year  
since our establishment  
Looking ahead to the next 100 years

**Masataka Yamaishi**

President and Representative Member of the Board



## Looking back on our 100th anniversary

On October 13th, 2017, Yokohama Rubber celebrated its 100th anniversary.

At the commemorative ceremony held to mark this occasion, we expressed our thanks to the stakeholders who have been with us through both the good times and the bad times, and we received many much-appreciated messages encouraging us to continue our efforts in the future.

Our company was founded during the First World War, and subsequently had to overcome major difficulties resulting from the Great Kanto Earthquake of 1923, the global depression of the 1930s, and the Second World War; despite these challenges, Yokohama Rubber has been able to survive and develop over a period of 100 years. Besides showing our gratitude to our predecessors for their hard work and dedication, in the future we will continue to adhere to the spirit of “working faithfully to keep an enterprise growing after it has been established” by creating new achievements while safeguarding the valued traditions of our company.

Over the period from 2006 to 2017, the Yokohama Rubber Group was implementing Grand Design 100 (GD100) medium-term management plan. As a result of the implementation of GD100, by comparison with 2005 our net sales rose by approximately 50%, our operating income increased by 30 billion yen, our market capitalization doubled, and our operating margin rose by 3 percentage points. A particularly noteworthy feature of this period was that, while overseas markets’ share of total sales continued to grow, we also realized several important technological achievements, including the raising of the share of all Yokohama Rubber products that are classed as environmentally-friendly products to 100%.

## About the Group’s GD2020 medium-term management plan

This year, the 101st year since our company was founded, we launched Grand Design 2020 (GD2020) medium-term management plan, which will be implemented over the period between now and 2020. Under GD2020, we will, in a sense, be focusing on the everyday fundamentals of business activity, working to recoup our investments and build on these achievements to realize further growth.

Over the medium and long term, the automotive industry can be expected to see major changes, due to the technology revolution represented by autonomous driving technology, etc. At the same time, demand for premium cars is rising throughout the world, and the market for premium tires that can be fitted to these cars is expanding. By making effective use of Yokohama Rubber’s existing strengths, we are able to manufacture high-value-added tires for the consumer tires segment, so I am confident that we can meet customers’ needs in the premium tire market. While continuing to strive for further improvement in the area of environmental performance, which is already one of our company’s strengths, and emphasizing speed and comfort, we will also be working to win customers’ trust, so that they know they can use our products with peace of mind. In addition, we will be making effective use of digital marketing to build direct links with the customer and develop products that precisely match customers’ needs.

In the commercial tires segment, Yokohama Rubber’s individual factories, as well as Yokohama Rubber Group member companies Alliance Tire Group (ATG) and Aichi Tire Industry, each has its own unique competitive strengths. By leveraging these strengths, we will be aiming to achieve a further increase in sales revenue in this segment.

Yokohama Rubber’s non-tires businesses are grouped together in the MB Group (Multiple Business Group). Here too, we will be working to realize an increase in sales, by making effective use of the strengths

of each individual business and by carefully studying customer needs.

One point that I particularly wish to emphasize is that Safety, Quality and Compliance are fundamental aspects of all of these business activities. If we neglect Safety, Quality and Compliance, then it will be impossible for our business activities to win the trust of society and of our many different stakeholders.

In 2017, Yokohama Tire Philippines, Inc. (YTPI) experienced a fire which caused serious damage; this incident was a cause of concern for many related parties. All employees will be participating in inspections and overhauling relevant systems so that, if any incident occurs that affects our operations in the future, we can ensure thorough implementation of the “Stop” – “Notify” – “Wait” safety rule, ensure the maintenance of a safe working environment, and, when an incident does occur, make sure that it is prevented from spreading, and bring about the restoration of operations as speedily as possible.

With this in mind, we are implementing measures that combine a variety of different approaches. In my own role as President, I will be issuing a “Top Message” that takes the form of an e-mail sent directly from me to each and every Yokohama Rubber Group employee, emphasizing the importance of Safety, Quality and Compliance. Senior managers will be implementing top-down measures to eliminate risks by visiting individual factories etc., and we will also be utilizing bottom-up measures that encourage individual employees to put forward relevant ideas that they have come up with themselves.



A lecture being given at a company-wide safety and disaster prevention meeting

## Working to solve international problems and fulfilling our social responsibilities in a way that reflects the core values of the Yokohama Rubber Group

In the process of implementing Grand Design 2020 (GD2020) medium-term management plan, living up to our customers’ expectations and dedicating ourselves to the development of society will be of key importance in ensuring a further 100 years of growth.

To achieve this, we are working to put in place a working environment that will support the dynamic engagement of a diverse range of human talent. We will also be responding to globalization by proactively cultivating local talent at our overseas business operations.

Acting in a way that reflects the core values of the Yokohama Rubber Group involves building close relationships with our stakeholders and growing together with local communities in each of the countries that we operate in. In order for us to be able to continue to share joy and happiness with our stakeholders over the next 100 years, everyone in the Yokohama Rubber Group needs to be working together to address international problems and fulfil our corporate social responsibilities.

# Main Products of Yokohama Rubber

## Automotive Components

**Tires for passenger vehicles**



We have a lineup of tires for a variety of car models including sports cars, sedans, SUVs, and minivans.

This lineup also includes the new product ADVAN dB that is a premium comfort tire.

The goal was to achieve an unprecedented level of silent performance. Refinements to achieve this level of silence change the very ambience of the cabin.\*1

**Tires for trucks and buses**



We have a lineup of tires that offers not only basic functions such as economic efficiency, durability, and safety, but that also matches use conditions including seasonal conditions and road conditions.

The truck and bus tires 710R features maximized abrasion resistance performance and uneven wear resistance performance, and aims to improve safety when there is an empty load in rainy conditions.

**Tires for construction machinery and industrial machinery**



We have a lineup of tires for giant dump trucks, scrapers that level the ground, wheel loaders that carry dirt, and dozers that conduct earth removal work. The rigid dump truck tire RB42 for construction and mining demonstrate excellent abrasion resistance and traction on soft ground and swampy ground.

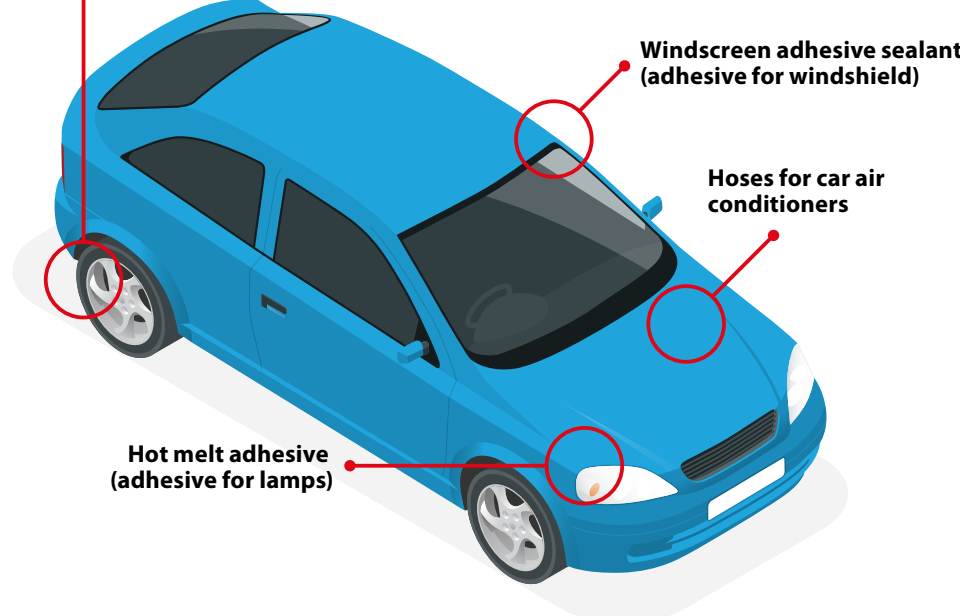
**Tires for agricultural machinery and forestry machinery**



These tires are manufactured and sold by the Alliance Tire Group\*2 and used for tractors, harvesters, combines and so on.

The FarmPro II is the world's first VF flotation tire offers the possibility to be operated at 30% lower inflation pressure as a conventional flotation tire. Low inflation pressure ensures wide footprint resulting in minimum soil compaction, better traction and enhanced fuel efficiency.

\*1: In Yokohama Tire's history    \*2: Yokohama Rubber Group company that manufactures and sells off-highway tires



**Windscreen adhesive sealant (adhesive for windshield)**

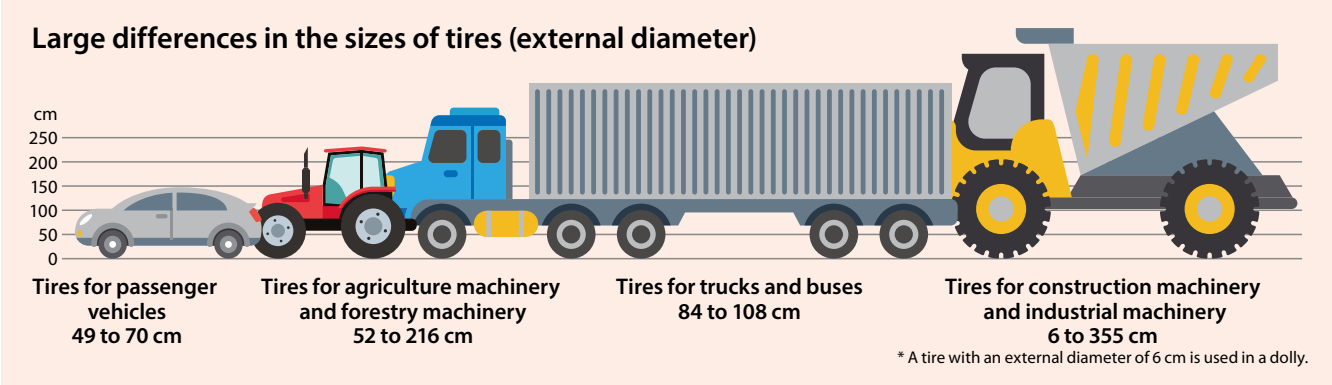
**Hoses for car air conditioners**

**Hot melt adhesive (adhesive for lamps)**

**Hose for construction machinery**



This is a hydraulic hose for construction machinery and industrial machinery. The Versatran hose in the photo is for construction machinery and it is in conformance with overseas standards (SAE, EN). It is characterized by its flexibility from the optimization of materials and its low minimum bending radius. In addition, cover rubber that supports flame resistant standards (MSHA) has been used.



## Petroleum, Mining, Construction, Aerospace, and Sports-related

### Sealants for construction

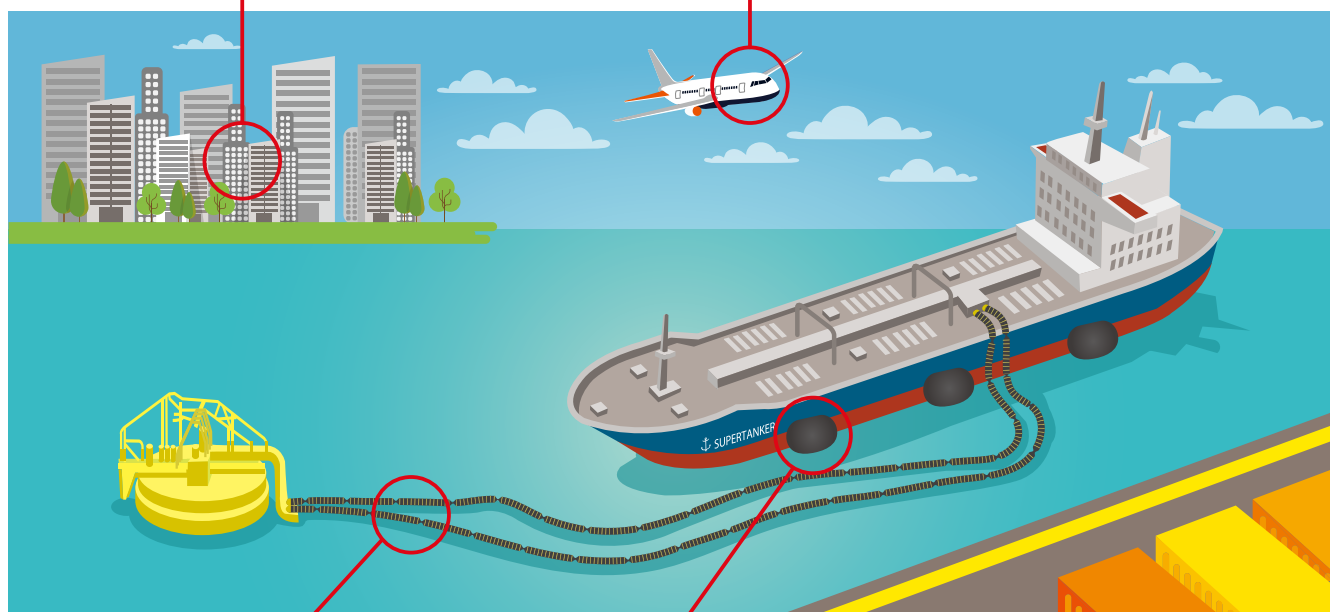


This material is used to fill the gaps in structures to improve the airtightness and waterproof performance of buildings. The new product "Hamatite SC-DM2" is a polysulfide sealant for joints of concrete and tile floor (or dirt floor), and because it hardens faster than products up until now, it has enabled shorter construction periods. The product has a high level of hardness and it excels in weatherability and oil and chemical resistance thanks to the unique compounding technologies that are used.

### Component for aircraft (drinking water tank)



This is a drinking water tank for an aircraft. It has been manufactured by wrapping thread such as glass or carbon fiber impregnated with plastic such as epoxy above an inner liner that has been molded seamlessly, and it meets high resistance to pressure and acceleration while having a low weight. It has been manufactured with materials that are suitable for drinking water under standards such as the US FDA and NSF-61.



### Marine hoses



These are hoses for connecting tankers anchored offshore and onshore facilities and transporting crude oil. Since the hoses are installed in the special environment of the ocean, abundant experience and advanced technical capabilities are required for design that fulfills durability requirements in order to withstand severe storms such as typhoons. There are only a very few companies around the world capable of designing and manufacturing marine hoses.

### Fenders



Yokohama Rubber has developed the air fenders that are currently being used broadly around the world. We first manufactured and sold a product in compliance with international standards in 2003, and we developed the world's largest air fender with a diameter of 6 m in 2017. We have focused on being the first in the world with these products.

→ P.14

### Hoses



Yokohama Rubber sells high-pressure hoses for various machine tools. The GT420 with a maximum use pressure of 42MPa has been added to the "GT Series", hoses for water and grout used for ground improvement. The hose structure has excellent ultra-high pressure performance and a hose cover with high abrasion resistance has been used to prevent external damage.

### Golf products



The PRGR Co., Ltd.\* golf products exploit outstanding design technologies and materials technologies fostered in aircraft and aerospace fields. The Q is a new club based on a new concept that makes golf more enjoyable and it easier to improve a score by helping to save shots from unfavorable positions. It is a piece of all-round equipment that will help amateur golfer get a better score.

\* Yokohama Rubber Group company that manufactures and sells sporting goods

## GD2020 Medium-term Management Plan

# GD 2020

The Yokohama Rubber Group has promoted global expansion and grown steadily over the 12 years of GD100. We have started the GD2020 medium-term management plan from fiscal 2018 as the next step. GD2020 is a framework for fortifying our business foundation by redefining our strengths and by deploying a growth strategy based on original approaches. We are counting on that framework to support new strides for the Yokohama Rubber Group in the decade of the 2020s.

## Growth Strategy

We will pursue a technology strategy of creating products of superior performance and quality through the company's unique capabilities in controlling physical properties and a global network of R&D platforms and a brand strategy of strengthening the Yokohama brand on a global level as we implement our growth strategy in each business field.

### Consumer Tires

Expand our presence in the premium tire market

### Commercial Tires

Make commercial tires a pillar of revenue driven by OHT\*

### MB Operations

Allocate resources on a priority basis to business fields of strength

\* OHT: Off-highway tires (collective name for tires for agricultural machinery, construction machinery, industrial vehicles, and forestry machinery)



## Fortify Our Business Foundation

As measures to fortify our business foundation, we strengthen our financial position by reducing interest-bearing debt and fixed assets, revitalize our corporate culture, and implement risk management measures, etc.

### Revitalize our corporate culture

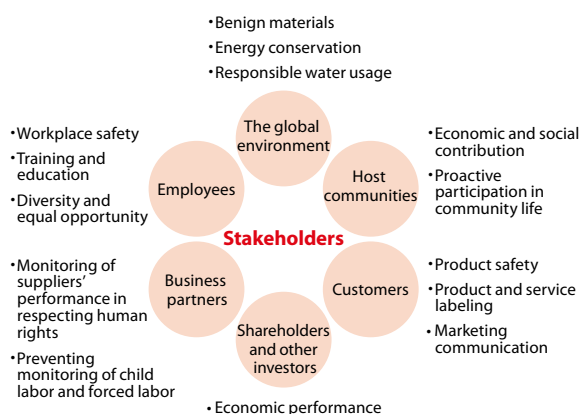
In terms of CSR, we will create value through business activities aimed at all of our stakeholders based on the concept of "Caring for the Future". In human resources management, we are working to revitalize our organization by training and mobilizing human resources effectively, and we are developing ideal working environments and introducing systems for diverse human resources.

### Strengthening our corporate governance

We will work to upgrade our corporate governance in Japan and overseas.

#### Strengthen global governance

- ✓ Positioning our regional management companies as holding companies (strengthening governance at our overseas subsidiaries)
- ✓ Appointing internal auditors at the regional management companies (strengthening audit structure on subsidiaries)
- ✓ Setting up whistleblower hotlines worldwide to help detect problems early and to prevent small problems from escalating

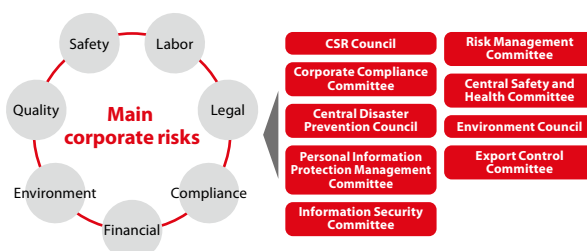


#### Board of Director system reforms

- ✓ Introduction of a compensation plan with transfer restricted stock
- ✓ Increase in number of nonexecutive members and decrease in number of in-house members

## Risk management

We have established several councils and committees, including the Risk Management Committee, the Central Safety and Health Committee, and the Corporate Compliance Committee headed by the CSR Council, and we work to minimize overall risk by managing systematically the different categories of risk that we encounter.



For details on the GD2020 medium-term management plan, please see the "Investor Relations" section of our corporate website (<https://www.y-yokohama.com/global/ir/company/gd2020/>).



# Safety and Disaster Prevention Initiatives

A fire broke out on May 14, 2017 at the tire plant at Yokohama Tire Philippines, Inc. (YTPI). We would like to again offer our sincerest apologies to the customers, the local community, and various other affected parties for the inconvenience and concern caused by the fire's outbreak and aftermath.

The Group will work company-wide to steadily implement fundamental fire prevention measures to ensure that a similar incident does not occur in the future.

## Overview of the fire

- Time of outbreak: Around 15:00 local time on May 14; completely extinguished around 23:00
- Fire stricken area: Approximately 17,400 m<sup>2</sup> in north-east area of east plant
- Details of fire: Buildings and production facilities partially damaged, products in warehouse destroyed in fire  
2 people injured in fire extinguishing activities



Area inside the red line is the affected area

## Fire Recurrence Prevention Measures

The company will verify all of the potential fire causes, and take fundamental measures against them. Furthermore, we will develop mechanisms that enable faster fire detection and extinction, and deploy them in production sites all over the world. We will then repeat inspection on firefighting equipment and fire drills as we work to ensure that a similar fire does not occur again.



Fire drills



Rescue training for injured people

## Strengthening Safety Efforts

Although we have conducted various safety initiatives in an aim for the creation of a safe and ideal working environment and good health, we have currently not achieved zero work-related accidents.

In response to this situation, we have conducted overall inspections on equipment at all production sites in Japan and overseas as a countermeasure to discover risks that could cause disasters, such as areas where people could become pinched by or caught in machinery or areas where people could fall. The management has been proactively involved in these overall inspections, and efforts are being made to thoroughly identify and improve all dangerous equipment based on strong leadership.

We are also expanding risk sensitivity drills to enhance sensitivity to risks so that employees can detect risks in advance and respond to them.

In addition, we are working to "instill safety awareness through grassroots corporate culture and spirit reform" to develop people capable of working safely and creating a safe workplace. As part of day-to-day efforts to improve the safety awareness, we distribute safety goods and repeat safety slogans with all employees before work.



Risk sensitivity drills



### Details of main efforts to strengthen risk sensitivity drills

- ① Expand contents of drills: Increase in types of and learning materials for risk sensitivity drills at locations including the Mishima Plant and YTMT\* (improvement in quality)
- ② Increase the number of times drills are held
- ③ Expand locations where drills are held: Drills have been established at all major plants in Japan and overseas, considering expansion

### Expected effects

- ① Honing sensitivity to various types of risks
- ② Maintain and improve risk sensitivity



Distribution of safety straps



Repeating safety slogans

\* Yokohama Tire Manufacturing (Thailand) Co., Ltd.

# CSR Slogan “Caring for the Future”

Under the GD2020 medium-term management plan, we must aim to become a global enterprise that is able to successfully develop localized business operations throughout the world. We will create value through business activities based on our CSR Slogan, “Caring for the Future.”



## SDGs

SDGs (Sustainable Development Goals) as common global goals which should be achieved by 2030 that were adopted by all 193 UN member countries at the United Nations Sustainable Development Summit in September 2015. 17 goals and 169 targets have been set as guiding principles for achieving sustainable development on a global level including the elimination of poverty and preservation of the natural environment with everyone around the world including citizens, governments, and companies working together to achieve by 2030.



## Relationship between SDGs and Caring for the Future



### Corporate Governance

Lay a solid foundation for supporting sustainable business activity in accordance with international norms.



### Products

Deliver products and services that help people enjoy fulfilling lives with peace of mind.



### The Earth

Address environmental concerns through our operations and help leave a sound natural environment to future generations.



### People

Nurture values accommodating diversity in the workplace and in the community at large.



### Community

Earn the confidence of neighbors through robust community engagement.



## Raising awareness on SDGs at the company

Global HR Department provides employee training programs at various steps such as when employees join the company or are promoted. Training on CSR is an important part among these programs. We conduct training aiming to understand our CSR vision and be able to incorporate it in their work as required of each important step of their life course, such as when entering the company, five years after entering the company, before and after being promoted to a management position, or before an assignment overseas for our employees.

For a new employee training in 2018, even most participants had heard of SDGs for the first time in training, they gained a better understanding of the importance of addressing SDGs through business activities and about the company's CSR efforts through group work.



SDGs group work in new employee training

## Corporate Governance

# Lay a solid foundation for fulfilling social expectations

### Main points of governance strengthened during FY2018

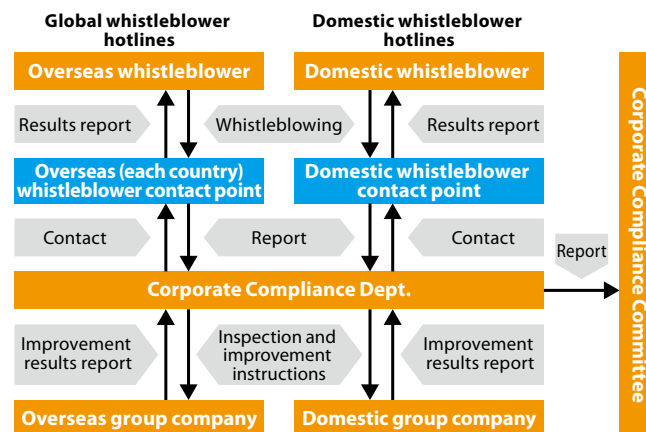
- Increase in number of nonexecutive members and decrease in number of in-house members
- Greater diversity among officers/auditors – promote our management initiative (2 non-Japanese officers, 1 female nonexecutive auditor)
- Introduction of a compensation plan with transfer restricted stock

### Strengthening the corporate governance framework

In order to further fortify our business foundation, Yokohama Rubber made preparations such as information gathering, discussions, and decision-making in 2017, and implemented Officer structure reform in March 2018. The basic policy towards the company's Board of Officers is a structure of people believed to be appropriate that ensures diversity including nonexecutive officers while taking into consideration the balance of knowledge, experience, and capabilities, etc. for each business. In an aim for the efficient operation of the Board of Officers, we have reduced the total number of Members of the Board by two in-house members to ten members, and we have increased the number of nonexecutive officers by one to four in an effort to ensure transparency of management and further strengthen corporate governance. The company's nonexecutive officers leverage its abundant economic experience and knowledge at other companies or universities, and holds lively debate based on opinions from independent and neutral position at the Board of Officers.

In addition, the diversity of Officers has been strengthened in response to an age of accelerated global expansion and change. We welcomed our first female nonexecutive auditor. In addition, one Corporate Officer each was promoted at Yokohama Tire Corporation (the United States) and Alliance Tire Group for a total of two additional non-Japanese officers to strengthen the structure to respond to global management issues from various perspectives.

Up until now, the company has adopted a performance-based compensation system for Members of the Board excluding nonexecutive officers, and a bonus mechanism that fluctuates in accordance with the attainment of company-wide performance and individual performance by each Member of the Board in each fiscal year. A compensation plan with transfer restricted stock has been introduced for Members of the Board excluding nonexecutive officers so that Members of the Board share the benefits and risks of stock price fluctuations with shareholders and to increase the motivation towards contributing to an increase in the stock price and corporate value.



### Global whistleblower hotlines

Yokohama Rubber established the Yokohama Rubber Group Competition Laws Compliance Policy and Anti-Bribery Policy in July 2017 with the approval of the Board of Officers, as legal compliance and response to the risk of bribery are becoming more necessary with the globalization of business. We aim to prevent acts that are in conflict with competition laws or acts of bribery by declaring this policy inside and outside of the company and prescribing rules and guidelines to embody this policy for indication to members of the company.

At the same time, we are gradually introducing global whistleblower hotlines that covers group companies focused on competition law violations and acts of bribery so that Yokohama Rubber can directly assess and promptly respond to these risks at overseas group companies.

In Japan, the Corporate Compliance Department has established whistleblower hotlines called the Corporate Compliance Hotline and General Counseling Room, while the CSR Procurement Contact Point has been established as a contact point for business partners by the procurement department, and some positive results have already been achieved through these efforts.

Overseas, we have introduced the above global whistleblower hotlines at regional management companies and tire sales companies in China. We will gradually develop these hotlines starting from Asia and expand them to other regions in an aim to strengthen governance on a global level.

The vision we aim for is a situation in which employees are aware of the Action Guidelines at all business locations including those overseas, the whistleblower hotlines are functioning, and meeting bodies that monitor this system are working. We will work to raise the level of compliance for the group by promoting the introduction of the global whistleblower hotlines.



**We create a corporate culture where appropriate decisions are made with a strong awareness of law observance**



**[Results of initiatives]**  
**Number of compliance reports**  
**117 reports** (FY2017, consolidated)

## VOICE

### Outside Audit & Supervisory Board Member



**Megumi Shimizu**  
**Nonexecutive Auditor, Audit & Supervisory Board Member**  
**Partner, Attorney-at-Law, Nishimura & Asahi**

I think that my role as a Nonexecutive Auditor, Outside Audit & Supervisory Board Member is to take advantage of the knowledge as a lawyer to check whether there are any legal problems with business execution by the management team and whether management decisions are sufficiently considered without jumping to conclusions, and to point out any suspicions or concerns towards the reasonableness of decisions from an external perspective. An understanding of the business of the company is important in order to fulfill this role, and I have been provided with the opportunity to make factory visits with information in a proactive manner that is easy to understand by an external party in situations such as advance briefings for the Board of Officers, even when time is limited. One area where problems can often occur is at group companies where it can be hard to conduct thorough checks. I intend to make fair evaluations and audit from an objective viewpoint based on external common sense and experience on what degree internal control is functioning as a group overall. The automobile industry is undergoing big changes such as the expansion of car sharing and the development of self-driving cars. The Yokohama Rubber Group is a company with a long history that is engaged in business on a global level, and I hope that Yokohama Rubber uses its technical capabilities to develop new products and develops new business areas as the world experiences technological innovation and significant changes in the behavior of people and the shape of society.

## TOPIC

### Legal Support Application that assists global expansion

A system called the Legal Support Application that is available on the internal intranet has been developed for requests (contract reviews, legal consultations, and response to disputes) to the Legal Department.

The Legal Support Application makes it possible to submit requests to the Legal Department without limitations on time or location, and the data submitted to the Legal Department by the requesting department and comments or review results from the Legal Department, etc. are recorded and stored in the Legal Support Application. As a result, information related to requests are centrally managed and it is easy to understand the background of requests later on. Because a record is kept of the background in addition to the review results, it also has the effect of facilitating reports to superiors and hand over at the time of transfers.

Password authentication is required when accessing the Legal Support Application so that viewing of a request is not possible by people other than people with the authority to view a given request. Taking security measures while setting access privileges makes it possible to share detailed information with superiors who have decision making authority.

#### User feedback

Using this system makes it possible to automatically share information with everyone involved, and because it records not only the results of consultations, but also the developments along the way, we have been able to eliminate wastes associated with creating reports.

(Hidetoshi Watanabe, General Manager, Head of MD\* Promotion Dept.)

\* MD: Muda (waste) Dori (elimination). The MD Promotion Department is a department that works to eliminate all types of wastes to achieve efficient and productive corporate activities.



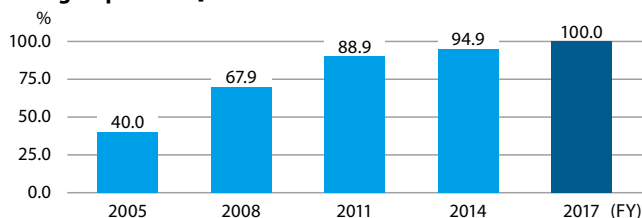
## Products

# Deliver fun and peace of mind: Environmentally-friendly products

## Turning all our products into environmentally-friendly ones

As of the end of fiscal 2017, we achieved our target of increasing the percentage of our products that feature environmentally-friendly technologies to 100%. We worked under our Action Guidelines to turn all of Yokohama Rubber's products into environmentally-friendly product in an aim to reduce our environmental impact from fiscal 2006, which we achieved in fiscal 2017.

### [Proportion of environmentally-friendly products among all products]



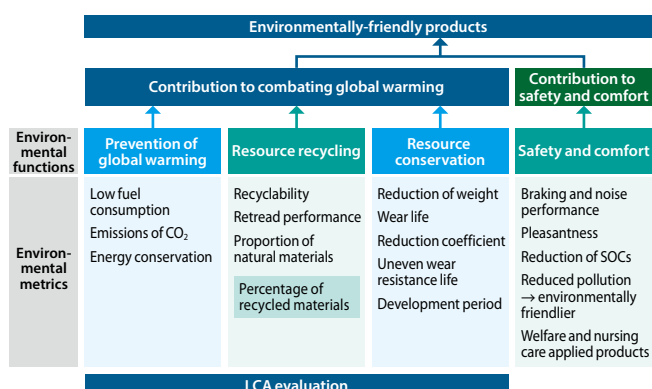
### ► Four criteria for assessing environmental friendliness

We assess products in reference to our own four environmental criteria from the procurement of raw materials to disposal and recycling: prevention of global warming, resource recycling, resource conservation, and safety and comfort. Our guidelines mandate that all new products achieve an aggregate improvement of at least 5% over existing products and that they at least match existing products in regard to all four criteria. In addition, we have a mechanism that does not allow commercialization if these criteria are not fulfilled.

Development work on new product candidates includes establishing targets, and each candidate undergoes a design review where we determine whether it has attained the targets. No product proceeds to commercialization unless it clears the design review.

An environmental assessment check is incorporated in the review, and product development is only possible if the Environmentally-Friendly Products Regulations are cleared. Safeguarding the environment will remain a core emphasis in product development at Yokohama, and that will include broadening our measures for preventing adverse environmental impact.

### [Four environmental functions and environmental metrics]



**BluEarth-air EF21**



## Development of BluEarth-air EF21: Our Latest Advance in Light-Weight, Fuel-Saving Tires

The BluEarth-air EF21 offers new advances in reducing environmental impact. We have achieved those advances by supplementing what was our most fuel-efficient tire with the latest Light-Weight design technology. The BluEarth-air EF21 was a limited-run offering (and has reached the target sales volume).

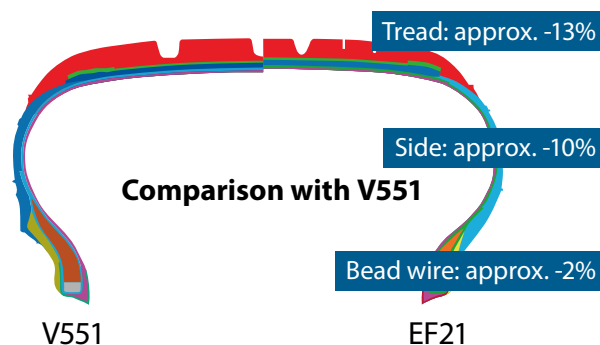
Reducing tire weight contributes to Fuel-Saving by reducing overall vehicle weight, and it also means a reduction in material consumption, which contributes to reduction in the environmental impact. We achieved a weight reduction of 25% in the BluEarth-air EF21 with design breakthroughs that engender a thinner, more-rigid structure.<sup>\*1 \*2</sup>

The BluEarth-air EF21 has earned the highest ratings under Japan's tire-labeling system for Rolling resistance (AAA) and for Wet Grip (a), and it combines Fuel-Saving performance with superior safety.

<sup>\*1</sup> The reduction in mass is in comparison with the ADVAN dB V551, a Yokohama benchmark for tire mass.

<sup>\*2</sup> We have submitted data for the tire specifications and performance to Japan's Tire Fair Trade Council.

### [Weight-Reducing Tire Concept]



**We continue to respond to changing needs by providing safe and high-quality products and services**



**[Results of initiatives]  
Proportion of environmentally-friendly products among all products**

**100%** (FY2017, consolidated)



MEGA Yokohama Floating Pneumatic Rubber Fender

### Contributing to safer cargo loading through the development of MEGA Yokohama Floating Pneumatic Rubber Fender

A fender is a cushioning product that fulfills the role of preventing damage to the hull and the quay wall during ship-to-ship operations or when ships are moored.

Yokohama's floating pneumatic fenders are fenders using the power of air as the first fenders in the world developed using rubber materials technologies. These fenders have many benefits including little degradation in performance after repeated use or changes in performance from the impact from crashing or changes in the temperature, and these fenders are widely used as materials for ship-to-ship operations or mooring in a wide variety of fields including oil, mining, fisheries, and offshore drilling. By using the world's largest with a diameter of 6m that was developed by the company in December 2017 for LNG-FPSO (floating production, storage and offloading system) where demand is expected to increase as demand for LNG\* rises, it has become possible to maintain a greater distance apart than that with previously existing fenders to increase the safety of offloading operations.

If an accident were to occur on the sea, it could cause immense damage to the environment and marine life. If fenders that do not fulfill quality standards become accidentally damaged, it could also result in damage the hull or the death or injury of a crew member.

These can be folded down to a small size for delivery to the site, as a product that can reduce transportation costs and energy consumption at the same time.

\* Liquefied natural gas



Offloading operations between two ships

#### VOICE

#### Developer of MEGA Yokohama Floating Pneumatic Rubber Fender



**Kouko Suzuki**  
Industrial Products Technical Dept. Group No. 3

This project was started in response to the needs for MEGA Yokohama Floating Pneumatic Rubber Fender along with increase in ultra-large ships so as those used for LNG transport around the world. It was extremely difficult to achieve a good balance when trying to increase the diameter to 6m because pressure resistance tends to worsen if size is prioritized. We were able to clear these challenges by introducing materials and manufacturing methods differing from conventional ones through a process of trial and error. With the cooperation of people from many different departments, we were able to complete fenders that are top-class in terms of size, quality, and performance for the first time in the world.

#### VOICE

#### Developer of BluEarth-air EF21



**Masatoshi Kuriyama**  
Tire Designing Dept. No.1 Group No.1

The BluEarth-air EF21 is a breakthrough product that has achieved a significant weight reduction while maintaining the highest levels for Wet performance, Rolling resistance, and Wear resistance that are inherently conflicting features. Dedicated compounds and the latest rubber mixing technologies have been adopted through engagement between structural design personnel and materials design personnel to achieve something that has not been possible as an extension of tire development up until now. We will leverage the concept of lightness going forward as we continue to aim for low-price tire products that are high quality, long life, and environmentally-friendly.

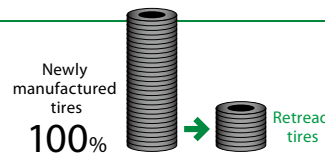
## Products

# Deliver fun and peace of mind: 3R promotion initiatives

**Retread**  
Retread Tire for TRUCK & BUS



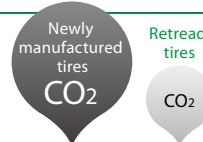
Manufacturing with only 32% of oil resources used in newly manufactured tires is possible.



68% savings

Source: Japan Retreaders' Association

A reduction in CO<sub>2</sub> emissions by approximately 60% during tire manufacturing and disposal can be achieved compared to newly manufactured tires.



Approximately 60% savings

Source: Calculated based on "Life Cycle Inventory Analysis for Tire" released by the Japan Rubber Manufacturers Association

## 3R promotion: Retread tires initiatives

Yokohama Tire Retread (YTR) is engaged in the manufacturing and sales of retread tires. Retread tires are tires that have been reused through replacement of tread rubber that has worn out to restore function as a tire. People have a high level of recognition and understanding of retread tires in Western countries, and the ratio of retread tire sales to the total sales of tires including new tires is at least 40%. However, in Japan, this ratio is currently less than 20%. They are mainly used as tires for trucks, buses, trailers, and dump trucks. YTR will strengthen cooperation with the related companies in the Yokohama Rubber Group and aim for the further spread of retread tires.

In light of the characteristics to the left, these retread tires offer strong environmental conservation effects from the perspective of the 3Rs (reduce, reuse, and recycle).

### Characteristics of retread tires

**Low environmental impact:** The environmental impact is lower because of approximately 32% of the petroleum resources (mass ratio, calculated by National Council on Retread Tires) required for production and approximately 40% of the CO<sub>2</sub> emissions during manufacturing compared to new tires.

**Excellent economic efficiency:** Because new truck and bus tires are basically designed while consideration to durability including retread usage, retread leads to total cost reductions.

**Ensures sufficient quality, performance, and service:** YTR is subject to regular quality inspections and quality evaluations by Yokohama Rubber, and after-sales service equivalent to that for new products is provided.

In terms of the production method, so-called "Remold method" is used in which a tire with unvulcanized\* ribbon shape rubbers wrapped to a tire casing is vulcanized in a mold. Feature of this method is high quality of appearance and suitable for mass production.

Another benefit is possible to apply tread design similar to new products. From year 2018, we also release wide-based tires (two tires replace to one of wide tire) for trailers and tanker trucks, and this has resulted in further contributions to the reduction of environmental impact.

\* Vulcanization: Process in rubber raw materials are heated after sulfur or other materials in order to strongly bond the rubber molecules and improve the properties of the rubber in terms of elasticity and strength.



Vehicle wearing wide-based tires Size: 385/65R22.5 Yokohama MY507A



## We preserve limited resources for the future



## [Results of initiatives] Ratio of recycled materials in products

**2.3%** (FY2017, consolidated)

## Achievement rate of total zero-emissions for wastes

**100%** (FY2017, consolidated)

### VOICE

**Retread tire production sites  
that are also addressing resource  
issues through quality oriented  
manufacturing**



#### Yokohama Tire Retread (YTR)

**Right: Osamu Takahashi, Senior Managing Officer and  
Head of Saitama Office (at the time)**

**Left: Ryu Takahashi, Manufacturing Section Manager**

**Osamu Takahashi:** We believe that demand will continue to grow for wide-based retread tires. Because the voice to develop this tire is getting larger. So we have prepared several new equipment for manufacturing this size. The entire YTR Saitama is working to manufacture this product to comply customers' requests.

**Ryu Takahashi:** Because the Saitama Office became the first of YTR's four offices in Hokkaido, Saitama, Nagoya, and Onomichi to manufacture wide-based tires, I feel both very honored along with a feeling of responsibility. We intend to make high-quality retread tires and contribute to resource issues.






Wide-based size retread tires subject to rigorous evaluation by Yokohama Rubber after the prototype was made at the Saitama Office

### TOPIC

#### Received Award for Resources Recirculation Technologies and Systems for reduction activities in the manufacturing process

The Ibaraki Plant received the FY2017 Award for Resources Recirculation Technologies and Systems\* for effort to reduce rubber mold materials in the hose manufacturing process. Rubber mold materials cover the outer surface rubber when a hose is manufactured, and they can be used repeatedly for about 30 times by peeling off from a vulcanized hose, grinding, melting, and molding. However, an issue faced is that the amount of materials recovered decreases as the recycling process is repeated. We have made significant improvements to this process through two initiatives.

- We have suppressed the occurrence of fine powder by making the screen mesh of the grinder larger and making the holding time in machinery shorter
- By using a conveyor belt instead of air transport, fine powder can be used as materials for the next mold without falling in the dust collector

	Grinder screen mesh	Effect from a) Pellet → Reuse	Effect from b) Fine powder	
				
			Reuse	Dust collector, etc.
Before improvement	Ø12	70%	0%	30%
After improvement	Ø20	85%	5%	10%

Ø (phi): represents the diameter

As a result of these efforts, we have improved the materials recovery rate after use 30 times from 70% to 90%, and reduced the annual usage amount of rubber mold materials by 3.6 tons.

\* Awards provided to promote excellent business and initiatives that contribute to the suppression of the occurrence of waste, reuse, and recycling. (Sponsored by: Japan Environmental Management Association for Industry)



## Deliver fun and peace of mind: Initiatives to improve quality and reliability



Work examination



Written examination

### Service Skills Contest National Championship

The Yokohama Tire Sales Group including Yokohama Tire Japan holds a Service Skills Contest for personnel at commercial tire directly-managed stores once a year for the purpose of ensuring that the same high-level of tire service is offered at all locations throughout Japan.

For the third such contest in fiscal 2017, the written examination was held at a hotel in Yokohama, Kanagawa Prefecture in September. On the day following the written examination, a skills test was held at the Honmoku Branch of Yokohama Tire Network Service Shutoken.

The qualifying round was participated in by one representative from 150 commercial tire directly-managed stores in eight different blocks for all of Japan. 13 participants who were able to survive the intense competition in the qualifying rounds then advanced to the final round.

The contest was judged based on safety, accuracy, and efficiency for the three items of a written examination, work, and customer service. The written examination consists of 30 questions relating to knowledge on standard work and major products to be answered within 50 minutes. There are two types of skills tests, one in which the front tires for a truck or bus have to be changed in 25 minutes and one consisting of customer service including a tire inspection to be completed in 15 minutes. The participants competed based on the knowledge, skills, and services that had been developed through day-to-day work.

This contest also served as an opportunity for announcements aimed at rolling out these efforts throughout the entire Yokohama Rubber Group, and Yokohama Club Network contract owner stores in the network of retail stores that mainly consisting of Yokohama Tire participated as judges. In addition to safe and secure work that had been a theme of the first two contests, efficiency was added as an important judgment point by setting a time limit for skills this time to see how fast participants could work while doing other tasks. In the customer service

examination, we focused on how participants properly communicated with customers on the details of the check through means such as putting a scar on a tire brought in by a customer and politely telling the customer how the tire could no longer be used or purposely setting a trap that could lead to a tire falling off by loosening a nut or space tire to check whether a thorough safety check is conducted as a professional.

As a result of rigorous screening by the judges, the top three participants were decided on as winners. The winners will serve as instructors for service training, etc. in the regional area they are responsible for.

These efforts are used to communicate advanced skills to all of Yokohama Rubber's commercial tire service personnel to encourage safe, accurate, and efficient work. We would like to expand participation to contract owner stores in the future.



Contest participants

**We have established  
a quality assurance system  
through all product processes**



**[Results of initiatives]**

**Number of newly certified tire service engineers**  
Domestic: **6** employees, overseas: **28** employees

**Number of tire complaint judgment delegates**  
Domestic: **27** employees, overseas: **1** employee

(Number of product safety employees  
with qualifications FY2017, consolidated)

**VOICE**

**Winner of the contest**



Osamu Mikami  
Receiving award certificate from Member of the Board and  
Managing Officer, President of Tire Business and Head of Japan  
Replacement Tire Sales & Marketing Division (at the time)

**Takafumi Omoda**  
**Yokohama Tire Network Service Chugoku**  
**Tire Center Kure Branch (left)**

Normally, I am mostly involved in removing and refitting tires for passenger vehicles and tires for trucks and buses.

In preparation for participation in the contest, I basically used the standard work manual for replacing tires for large trucks as a reference point for constant repeated practice for book study and thinking about the response when a customer comes to the branch, the work procedure, and how to allocate time while receiving instructions from my seniors in-house. Although I felt quite nervous, I approached the contest with the intent of adhering to the basics. I think I was able to come in first place thanks to this approach.

When seeing the certificate and plaque displayed in our branch since I won the contest, customers now tell me that they feel reassured with letting us do their tire replacement work, and I think that customers feel even more reassured towards our work than up until now.

Although I had not been able to see how people did this work in other regions up until now, by looking at the DVD that was recorded during the contest, I have been able to learn about unique work tool innovations or efficient approaches used by some branches.

Our branch will try to innovate while incorporating the good points from other branches as we encourage each other through friendly competition.

**TOPIC**

### **Learning about Sustainable Development Goals (SDGs) (Workshops for business partners)**

We purchase wide variety of raw materials to make various kind of products and materials that are used in our plants. These materials are provided by various business partners. We have seven plants throughout Japan, and each of these plants has developed in cooperation with companies engaged in business in the respective region.

We hold workshops together with business partners aiming to sustainable procurement of raw materials and other materials to ensure stable production. In these workshops, we learned about compliance and harmony with nature (biodiversity) in fiscal 2016 and SDGs, resource recycling, and health and safety in fiscal 2017. In addition to getting better understanding CSR, we believe that we can minimize management risks through supply chain and create win-win relationships that are mutually beneficial. At the workshop, we ask some requirements to our suppliers related to CSR and cultivate a common understanding regarding CSR.

364 people from 330 companies have participated to the workshop in fiscal 2017, and we heard from our suppliers that they thought they have enriched their understanding of CSR by hearing topics and information that they had seldom heard, and they have brought back them to their companies.



Workshop being held

Corporate Governance

Products

The Earth

People

Community



# Leave a sound environment to future generations:

## Yokohama Forever Forest activities



The 1st Tree Planting Festival, held at the Hiratsuka Factory in November 2007



Tree planting at Yokohama Tire Manufacturing (Thailand) Co., Ltd. (YTMT)

### Yokohama Forever Forest – Moving on to the next step

#### ► What is the Yokohama Forever Forest project?

The Yokohama Forever Forest was initiated as a project to plant 500,000 saplings which selected by the theory of potential natural vegetation in our Yokohama Rubber Group factories and sales locations around the world by 2017, the year that marked the 100th anniversary of the founding of Yokohama Rubber. This project intended to achieve as follows: Developing participants' environmental awareness; Disaster prevention, and forming environmental conservation forests; Helping decelerate global warming; Conservation of biodiversity; and Communicating with regional communities. The project was about more than just planting trees; we undertook this project as "Regeneration of indigenous forest to help protect lives," for the global environment and for local communities.

A key aspect of the Yokohama Forever Forest project is that it involves the participation of all Yokohama Rubber Group employees. All of the work – such as collecting acorns, planting them in pots, applying fertilizer to and watering the saplings in the pots, building the mounds of earth in which the trees will be planted, to the actual tree-planting and the subsequent maintenance work, etc. – is undertaken through the sweat and toil of Group employees themselves, working together to bring the project to fruition.

#### ► Goal achievement status

The Yokohama Forever Forest project was launched on November 11, 2007 with the first tree-planting at the Hiratsuka Factory. Since then, tree-planting has been carried out at 14 Yokohama Rubber Group business locations in Japan and at 20 Group business locations in 8 countries overseas. The goal of planting 500,000 trees was reached in September 2017. After achieving this target, we have continued to carry out tree-planting, and as of December 31, 2017 the total number of trees planted had reached 525,662.

Besides planting trees in the grounds of factories and other Yokohama Rubber group facilities, we have also donated saplings to local municipalities, schools, other business enterprises, etc. free of charge, and provided guidance on tree-planting. As of December 31, 2017, the total number of trees donated in this way, in Japan and overseas, came to 326,673.

#### ► Future goals

The Yokohama Forever Forest project is also helping to safeguard the genetic diversity of local tree species and to maintain and restore local ecosystems. By providing trees for a particular locality, once the trees have grown they will provide a habitat for insects, birds, etc. If these habitats can then be linked together, so that creatures can move easily between them, then this can help to enrich the ecosystem of the entire region.

In addition, building on the experience gained in the creation of the "Heisei Forest" at Otsuchi-cho in Iwate Prefecture, the Yokohama Forever Forest project has also contributed towards the creation of forested embankments (Green Tide Embankment) that can help to protect human life in the event of a natural disaster, and towards disaster prevention and disaster response awareness-raising.

By making effective use of the knowledge that has been accumulated through the implementation of the Yokohama Forever Forest project, we intend to continue with the implementation of related measures, focusing on the donation of tree saplings and the provision of tree-planting know-how, with the aim of contributing towards the conservation of biodiversity in local communities. Through this continued implementation, we intend to realize the goal of having a grand total of 1.3 million trees planted by 2030 (including both the trees that have been planted and donated so far and future tree plantings and saplings donations).



Ceremony held to mark the donation of saplings to the Shinwa Gakuen Institute



**We provide opportunities  
to come into contact with nature  
and to learn from nature**

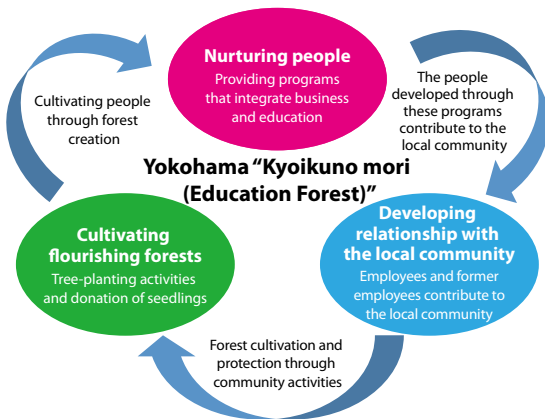


**[Results of initiatives]  
The results of the Yokohama  
Forever Forest project:**

**No. of trees planted + No. of saplings donated**

**852,335** saplings planted and donated

(As of December 31, 2017, consolidated)



## The "Education Forest" concept

### ► The aims of the "Kyoikuno mori (Education Forest)" project

To further develop the "Developing participants' environmental awareness" and "Communicating with regional communities" aspects of the Yokohama Forever Forest project, Yokohama Rubber has decided to implement a new "Kyoikuno mori (Education Forest)" project. This project will involve utilizing various different forms of educational content provision, including visiting lectures, to provide children at local schools with the techniques and knowhow that we have accumulated; our goal is to provide the children with a "way in" to adventures in new worlds of knowledge, and with an opportunity to acquire wisdom that will help them to live fulfilling lives.

### ► Goals, and anticipated implementation items

We provide content aimed at kindergarten and nursery school children, elementary school and junior high school students, senior high school students, and teachers.

#### The programs that we are currently providing:

- Road safety etiquette classes
- Rubber's functions
- Acorn handicrafts and tree seedling cultivation
- "Let's plant trees!" activity

### ► Future objectives

The "Education Forest" project provides easy-to-understand educational programs that use Yokohama Rubber's products and services, and the tasks that Yokohama Rubber has to implement in order to provide these products and services, as the basis for the teaching materials. The aim is to get children looking at things from a scientific perspective, to make them more observant and to awaken their interests. We also hope that the project will help to enrich students' lives, and that the communication between Yokohama Rubber employees and local communities can plant the seeds for the development of new technologies and new knowledge in the future.

## TOPIC

### Cultivating local communities' next generation through the "Education Forest" project

#### Implementing the "Acorn Handicrafts and Tree Seedling Cultivation" visiting class

In April 2018, Yokohama Rubber's Shinshiro Plant organized an "Acorn Handicrafts and Tree Seedling Cultivation" visiting class for 1st grade and 2nd grade students at the Shinshiro Municipal Yana Elementary School. Shinshiro Plant employees acted as instructors for the class. In the acorn handicrafts part of the class, the instructors showed the children how to make floral wreaths for Children's Day, while in the tree seedling cultivation part of the class they showed them how to plant tree cuttings in pots.

The School Principal commented that "Children in the younger grades are full of curiosity and eager to learn. I feel that having people from outside the school come in to teach them is a very good thing, as it is very stimulating for the children. I hope that we will be able to host more visiting classes like this in the future."

This was the fifth time that the "Acorn Handicrafts and Tree Seedling Cultivation" visiting class had been held at Yana Elementary School. In the future, Yokohama Rubber will continue to actively implement activities that can help to build a friendly relationship of trust with local communities, focusing on the goals of "Cultivating flourishing forests," "Cultivating people," and "Cultivating links with the local community."



Acorn  
handicrafts  
class in  
progress



The tree  
seedlings that  
the children  
planted



The Earth

# Leave a sound environment to future generations:

## Building a sustainable supply chain

### Measures implemented by the Yokohama Rubber Co., Ltd.

#### SNR-i's 5 objectives:

- Supporting the improvement of natural rubber plantations' productivity
- Enhancing natural rubber quality
- Supporting forest sustainability
- Demonstrating appropriate water management
- Demonstrating the highest respect for human and labour rights

#### Yokohama Rubber supports the Sustainable Natural Rubber Initiative (SNR-i)

Yokohama Rubber supports the goals of, and participates in the activities of, the Sustainable Natural Rubber Initiative (SNR-i) launched by the International Rubber Study Group (IRSG), an inter-governmental organization composed of rubber producing and consuming stakeholders.

The World Business Council for Sustainable Development (WBCSD) has also begun discussion and examination of the issue of sustainable natural rubber through its Tire Industry Project (TIP). Yokohama Rubber will be fulfilling its responsibilities as a member of the WBCSD's TIP.

With both the global population and the number of motor vehicles per head of population continuing to increase, demand for tires is expected to grow continuously into the future. Since it can therefore be assumed that demand for natural rubber will also increase, with recognition for its responsibility to society as a manufacturer of tires and other rubber products, Yokohama Rubber is working actively to promote these projects.

The goal of promoting CSR activities throughout the value chain forms an important part of the Yokohama Rubber Group's CSR Materiality. Starting from 2014, we have been surveying conservation of biodiversity and human rights protection status etc. in natural rubber farm in Thailand and Indonesia. In addition, the Group's natural rubber processing subsidiary in Thailand has been encouraging farmers to adopt the agroforestry practices, which cultivate 10 or more different species – including bamboo, fruit trees, etc. – together with natural rubber trees. In the following sections, we present some examples of the CSR activities that Yokohama Rubber has been implementing through the value chain.



Suppliers Day

#### Implementation of supplier meetings for natural rubber suppliers

In April 2018, the Yokohama Rubber Group held its 2nd Suppliers Day meeting for natural rubber suppliers. A total of 42 representatives of 25 companies in 5 countries attended the meeting, at which Yokohama Rubber requested the suppliers' assistance in regard to the implementation of measures aimed at making natural rubber a sustainable resource, in line with our CSR policy; the Suppliers Day event helped to lead to strong mutual understanding with suppliers.

Natural rubber is produced mainly in Southeast Asian countries, including Thailand, Indonesia, Vietnam, etc. Most natural rubber is not produced on large-scale plantations, but rather on large numbers of small-scale farms (smallholders).

With the aim of conservation of biodiversity and minimizing the impact of climate change, Yokohama Rubber has been working together with suppliers to ensure traceability and to maintain transparency in the supply chain.

During the Suppliers Day meeting, Yokohama Rubber gave a presentation on the agroforestry project that we are implementing in the Surat Thani district of Thailand. Using a video message, Professor Sara Bumrungsri of the Prince of Songkla University, who has been providing Yokohama Rubber with guidance to support the diffusion of agroforestry, explained the agroforestry measures that we have been implementing, and discussed recent findings from his research.

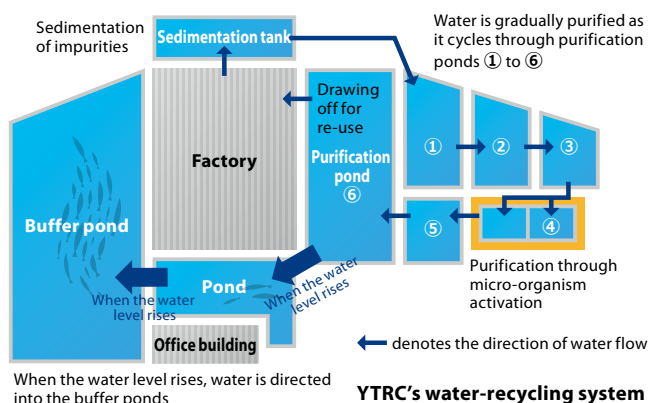
With the aim of ensuring sustainable production of natural rubber that is in harmony with the natural environment, we will continue to implement measures that build a win-win relationship with farmers that helps farmers to maintain their financial autonomy.

**We are working,  
through our business operations,  
to make natural rubber  
a sustainable resource**



**[Results of initiatives]  
Number of suppliers  
participating in Suppliers Day  
42 participants from 25 companies  
(in 2018)**

## Measures implemented at our natural rubber processing plant (YTRC)



## YTRC's water cycle measures

Y. T. Rubber Co., Ltd. (YTRC) is Yokohama Rubber's Thai rubber manufacturing subsidiary. When the YTRC plant first began operation, we signed an agreement with the local community undertaking not to allow any of the water used in the plant to be discharged outside the plant; we have been using a water cycle system that enables water to be repeatedly reused. YTRC uses two types of rubber raw material to manufacture Standard Thai Rubber (STR); water is used mainly in the process of washing these raw materials.

YTRC has a sedimentation tank and six purification ponds inside the factory premises; water cycles through these and is reused. Water that has been used in the manufacturing process is first transported to the sedimentation tank, where non-soluble substances are deposited. The water then cycles through the six purification ponds, where microorganisms are used to purify the water. One of these ponds is fitted with equipment for stirring the water for a set period of time so as to mix air in with the water, which accelerates the process of purification by microorganisms. The purified water is then used again in the manufacturing process.

The water in the purification ponds is sampled on a regular basis to analyze the water quality, which facilitates proper management. When the water level in the purification ponds rises because of heavy rains, the ponds located adjacent to the office building and the buffer pond function as overflow reservoirs, preventing the washing water from overflowing outside.

In order to allow this water cycle purification system using sedimentation and microorganisms to operate at full effectiveness, with regard to the washing water used in the plant, valves can be turned off whenever any of the production process equipment is shut down, and the amount of water drawn off from the ponds is automatically reduced, so that the overall amount of water being used can be properly controlled. This method enables the amount of water needed in the water cycle to be reduced by around 30%; furthermore, by increasing the amount of time that the water spends

in the sedimentation tank and being purified by microorganisms, it also improves the water quality and reduces energy consumption.

For domestic water other than drinking water, the plant uses river water that has undergone chemical treatment, filtering, and sterilization treatment. The roof of the water storage tank used to store the processed water has been modified to collect rainwater; by using rainwater, the amount of river water that is needed can be reduced. Domestic wastewater passes through the septic tanks and purification ponds before being reused as washing water in the plant.

The buffer pond has the same species of fish living in it as the nearby Tapi River. It would be fair to say that the retarding basin provides an alternative habitat for the Tapi River organisms, and thus contributes to safeguarding the biodiversity of the Tapi River. YTRC employees catch fish from the buffer pond on a regular basis to research fish species and their numbers, thereby verifying that the buffer pond is maintaining its own biodiversity.

YTRC allows local residents free access to the buffer pond, giving them the opportunity to catch fish there. In this way, in 2016 around 12 tons of fish were provided for local residents. This measure has also enabled YTRC to make local people aware of the fact that the buffer pond is contributing to biodiversity by maintaining water quality and a water environment that allows the same species of fish that live in the Tapi River to thrive there. For YTRC to be able to continue its production activities in this region, it is vitally important to have the understanding and acceptance of local residents. In addition to the activities outlined above, the staff members of YTRC's environmental safety department also hold regular meetings with local residents. By listening to local people's views, YTRC is able to ensure that these views are reflected in YTRC's CSR measures; the meetings also provide an opportunity to inform local residents about YTRC's activities, and thereby strengthen the relationship of trust that exists between YTRC and the local community.



# Leave a sound environment to future generations: Building a sustainable supply chain

## Measures implemented at natural rubber farms



A farm that practices agroforestry



Dr. Sara Bumrungsri giving a seminar

### Support for natural rubber farms (YTRC)

In order to ensure sustainable procurement of natural rubber, which is an important raw material for the manufacturing of tires and other rubber products, Y. T. Rubber Co., Ltd. (YTRC) is providing support to encourage the widespread adoption of the agroforestry method. Agroforestry involves the inter-cropping of a variety of different crops and tree species on the same farm. The agroforestry approach offers many benefits; for example, the farmer can enjoy a stable income from the harvesting of multiple different crops, including natural rubber, fruit, lumber, etc., and this approach also helps to improve biodiversity within the farm.

From the time when a rubber tree sapling is planted, it takes around 5–8 years of growth before latex can be harvested from the tree. With agroforestry, the farmer will have other sources of income from other crops during this period. A further point is that the price of rubber tends to fluctuate dramatically depending on market conditions; even after the rubber trees on a farm have matured enough for the farmer to be able to extract rubber from them, having a wide variety of other crops growing on the farm can help to stabilize the rubber farmer's income.

Rubber trees experience a period called "wintering" every year, when the leaves fall off all of the rubber trees at the same time before new leaves start to grow. Outside this period, the leaves tend not to fall off, so once the leaves that fell off during the wintering period have been decomposed by insects and microorganisms, etc., there is nothing left to cover the soil, which as a result tends to become very dry. If a variety of different plants are inter-planted together, the soil will always have fallen leaves covering it, which will protect the soil from becoming too dry. The decomposition of the fallen leaves also provides free fertilizer for the rubber trees, contributing to a reduction in costs for the farmer.

Rubber trees are affected by a disease called white root disease (WRD), the risk from which is particularly high in Southeast Asia. Once a rubber tree becomes infected with WRD, the disease can

spread to other nearby trees very rapidly, and when WRD has been in the soil, that area of land cannot be used to cultivate rubber trees for at least five years. On agroforestry farms, because a wider variety of different plant species are being grown, the range of microorganisms in the soil is much more complex, and it is believed that this makes it more difficult for WRD to gain a foothold.

With assistance from Dr. Sara of the Prince of Songkla University, a noted expert in the field of agroforestry, YTRC has organized agroforestry seminars for natural rubber farmers in and around the Surat Thani district, acting as liaison between Dr. Sara and the farmers, and providing venues for the seminars. Dr. Sara's research has shown that farms that practice agroforestry have higher yield and higher income than conventional natural rubber farms. However, because the number of case studies is still relatively small, YTRC has been striving to get more farmers to adopt the agroforestry practices. When YTRC first launched this project in 2016, there were 10 participating farms, with a total area of approximately 12 hectares; by 2017, this had increased to 27 farms, with a combined total of around 40 hectares. It is anticipated that, by 2020, farms with a combined land area of around 180 hectares will be practicing agroforestry.

In 2017, the direct support provided to farmers by YTRC included the provision of approximately 4,000 saplings and around 10 tons of compost. The saplings were cultivated in nursery located within the YTRC factory grounds using seeds collected by YTRC employees. The compost was made using sediments that are a by-product of the natural rubber manufacturing process, together with grass cuttings from the factory grounds and food waste from the factory cafeteria, etc.



**We provide support to farmers  
to make natural rubber  
a sustainable resource**



**[Results of initiatives]  
Agroforestry initiative**

**27** farms (covering a total area of  
**approximately 40** hectares)  
(As of December 31, 2017)

## VOICE

### An agroforestry farmer



**Mr. Prajub Nuphet**

It is now eight years since I first started using the agroforestry approach in a corner of my natural rubber farm. When I first heard about agroforestry, my immediate reaction was "That sounds like a really great agricultural technique!"

After implementing agroforestry for a few years, I stopped using chemical fertilizers altogether. The crops that I have planted on the farm include fruit trees, plants that are used to make spices, and trees the wood from which can be used to make furniture, etc. Not only has adopting agroforestry helped to give me a more stable income, the fact that I am doing something which is beneficial for everyone makes me feel very proud.

Over the past few years, rapid development in the Surat Thani district has led to a decline in the number of wild animals. However, since I started implementing agroforestry, there has been a pronounced increase in the number of butterflies and other insects, wild birds, etc. on the farm. In addition, although it hardly rains at all in Surat Thani during the dry season, the fallen leaves from the additional tree species help to retain moisture, so the soil doesn't dry out.

I am very grateful to YTRC for providing the seedlings. There is a lot that I don't know about agricultural techniques and market conditions in relation to crops other than natural rubber, so it would be great if I could access this kind of information. In the future I plan to start growing an even wider variety of crops, including coffee, vegetables, etc., and I hope to become an agroforestry expert so that I can transform my farm into a learning center.

## TOPIC

### Working towards sustainable natural rubber procurement

#### Supply chain survey in Indonesia

In March 2018, we engaged in communication with small-scale natural rubber farmers (smallholders) on the island of Sumatra in Indonesia, in collaboration with Indonesian company PT. Kirana Magatara, a leading supplier of natural rubber. The latex from natural rubber trees is collected and the rubber component is extracted and processed in block form, which is used in the production of tires and other rubber products. Around 80% of natural rubber production derives from smallholders with a cultivable land area of less than 2 hectares. As an agricultural crop, the natural rubber harvest varies depending on the season and on weather conditions. The price of natural rubber also tends to fluctuate dramatically depending on international market conditions. The natural rubber supply chain is very complex, with 2–6 (or even more) intermediaries between the producer and the firms responsible for rubber processing and shipment in Indonesia. PT. Kirana Magatara is working to strengthen rubber farmers' economic autonomy by providing them with knowhow that they can use to boost rubber yields and improve rubber quality. These efforts are also helping to conserve biodiversity and minimize the negative impact of climate change. By strengthening ties with stakeholders, these measures support sustainable value creation. As a user of natural rubber, Yokohama Rubber has been learning about PT. Kirana Magatara's initiatives, and has been listening directly to the views of small-scale rubber farmers, with the aim of contributing to activities that can make natural rubber a sustainable resource.



Natural rubber  
being harvested

## The Earth

# Leave a sound environment to future generations:

## Initiatives aimed at saving energy and promoting the use of natural energy sources



Green Curtain initiative at the Onomichi Plant

### Energy-saving measures are being implemented at all Yokohama Rubber tire production plants

In recent years, with the adoption of the Sustainable Development Goals (SDGs) by the United Nations and the adoption of the Paris Agreement at the 2015 United Nations Climate Change Conference (COP21), there has been growing demand from society for measures aimed at realizing sustainability. At the same time, investors and other stakeholders increasingly expect companies' business strategies to be linked to their CSR strategies. In line with these trends, the Yokohama Rubber Group has also been implementing measures to foster energy saving and the use of renewable energy. In regard to energy conservation, it is important to make the necessary preparations for implementing practical measures in line with the company's medium-term and long-term objectives, while striving to strike the right balance between greenhouse gas (GHG) reduction and maintaining profitability. The tire manufacturing process consumes large amounts of energy. The Facilities Administration Department provides support for energy-saving activities in a variety of areas, including the adoption of energy-efficient machinery (and upgrading existing machinery to make it more energy-efficient), reducing energy losses, etc. Tire manufacturing equipment and arrangements are constantly changing; in order to be able to monitor actual energy consumption during production more accurately, the Department is developing management systems that allow detailed, wide-ranging measurement, and will be reflecting the results of this measurement in its operations. Other important responsibilities of the Facilities Administration Department include formulating plans for realizing efficient operation of the electric power and power distribution equipment, boilers, water supply and waste water discharge equipment etc. in our factories, and drawing up measures for reducing GHG emissions deriving from air-conditioning coolant, etc. Over the last few years, we have gradually been expanding the scope of implementation of measures such as the installation of large-scale cogeneration (Combined Heat & Power) systems and switching over to different fuels for boiler operation to include not only plants in Japan but also our overseas factories. Implementing energy-saving initiatives overseas can be very challenging, but the benefits in terms of GHG emission reduction can be substantial, and we will continue to actively implement these measures. There is still considerable room for implementing further renewable energy measures, and we will continue to monitor new technology developments carefully with this aim in mind.



Kenji Ishii, Manager, Electricity & Measurement Section,  
Facilities Administration Dept.



Cogeneration system at YTMT

### Promoting the adoption of cogeneration systems

Yokohama Tire Manufacturing (Thailand) Co., Ltd. (YTMT), our manufacturing facility in Thailand, began operation of a cogeneration system that uses gas turbines and a waste heat boiler to realize efficient electricity generation in May 2017; YTMT has become the first overseas production location in the Yokohama Rubber Group to install a cogeneration system.

By providing low-cost electricity and steam, cogeneration systems help factories to both save energy and reduce costs. The cogeneration system at YTMT is expected to reduce annual CO<sub>2</sub> emissions by 9,300 tons (14%) compared to fiscal 2016, while also reducing YTMT's utilities expenses by 3–6%.

In Thailand, where the electric power supply is somewhat unreliable, the cogeneration system can also function as an emergency power supply in the event of a power cut.

As of 2017, cogeneration systems were in operation at three of the Yokohama Rubber Group's domestic production facilities in Japan. By maintaining 24-hour operation, these cogeneration systems provide 73% of the electric power consumed by the plants, and they also provide almost all the steam needed by the plants; they also contribute towards reducing CO<sub>2</sub> emissions, and towards reducing the amount of electric power needed from the power companies, including a reduction in peak power demand.



Cogeneration system at the Mie Plant



## We implement activities to reduce our environmental footprint on an ongoing, Group-wide basis



### [Results of initiatives] Greenhouse gas emissions

Scope 1	363,000 t-CO <sub>2</sub>
Scope 2	354,000 t-CO <sub>2</sub>
Scope 3	23,237,000 t-CO <sub>2</sub>
(FY2017, consolidated)	



Solar panels installed on the roof of a building

### Adoption of photovoltaic electric power generation in India

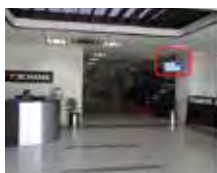
In India, where atmospheric pollution is becoming an increasingly serious problem, in order to realize an improvement in the environmental situation while still maintaining economic growth, there is a clear need to shift away from the use of fossil fuels such as coal and petroleum towards natural energy sources that will help to reduce CO<sub>2</sub> emissions. The policies adopted by the Indian government seek to promote the rapid adoption of photovoltaic (PV) electric power generation as part of this shift.

In 2014, Haryana State, where Yokohama India Pvt. Ltd. (YIN) is located, launched a PV development plan that aims to boost PV electricity generation capacity in the State to 4,030 MW by 2022; as part of this plan, YIN was asked to install PV capacity equivalent to at least 8% of its contracted electric power usage (as of 2017).

YIN installed 625 PV panels, with a combined generating capacity equivalent to 9% of the company's contracted electric power usage. As a result, over the period August 2017 – March 2018 YIN succeeded in reducing CO<sub>2</sub> emissions by around 112 tons (this calculation assumes that reducing electric power consumption by 1 kWh is equivalent to a reduction in CO<sub>2</sub> emissions of 0.8 kg). On sunny days, the PV panels have a combined generating capacity of 125 kW per day, although the average value is around 80 kW per day. The electric power generated using the PV panels is used for lighting, electrical sockets etc. within the factory, and thus contributes towards reducing YIN's electricity charges.

There are plans to expand the scale of the YIN factory, which in turn will lead to an increase in the amount of PV generating capacity that YIN is required to install. YIN is planning to increase the capacity of its PV system by March 2022 in order to meet this requirement.

There is a display monitor at the YIN factory's reception building that shows how much electric power is being generated by the PV system, thereby helping to stimulate environmental awareness. Through this project, YIN is contributing towards environmental improvement in India.



The display monitor at the factory's reception building showing the amount of power generated by the PV system



### TOPIC

#### Switching over to gas boilers

Recognizing the seriousness of the problem of atmospheric pollution, in 2017 the Chinese government introduced new measures to regulate emissions of coarse particulate matter from factories. Shandong Province has followed suit, and although Shandong Yokohama Rubber Industrial Products Co., Ltd. (YRSC) had already fitted coarse particulate matter removal devices to its coal boilers in fiscal 2016, in March 2017 the municipal government of Weifang City, where YRSC is situated, issued a notification requiring that all coal boilers of 10-ton capacity or smaller located within the City be dismantled; in response, YRSC decided to replace its coal boilers with gas boilers and also switch over from steam to oil as the heat transfer medium.

Using oil – which has superior charging efficiency – as the heat transfer medium means that, by having the oil circulate once it has been heated up, temperature loss can be controlled, and less gas is needed than when coal is used as the heat transfer medium. The new gas boilers began operation in October 2017, with the target noted below.

In the future, YRSC will continue to collect information regarding environmental policies and guidelines, and will work proactively to address environmental issues.

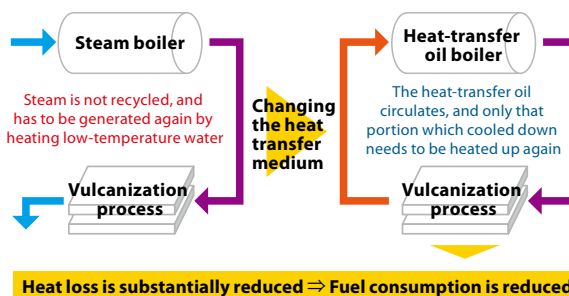


The new gas boilers

#### [YRSC's targets]

Reduce CO<sub>2</sub> emissions per unit of output by at least 45% in FY2018 compared to the base year (FY2017)

#### Heat loss with steam and heat-transfer oil compared



## People

# Build on each other's strengths: Initiatives to foster diversified work styles

### Basic Policy on Women's Participation and Advancement in the Workplace

Aiming to be a company that welcomes diversified workstyles, with an employee-friendly working environment that will encourage employees to stay with the company over the long term

### Working towards the adoption of new systems that will create a more employee-friendly working environment

In line with our goal of creating a more employee-friendly working environment for all employees, including female employees, in 2016 Yokohama Rubber established the Women's Participation and Advancement Taskforce. The Taskforce is currently operating with eight core members, implementing activities in collaboration with each individual department.

In 2017, the Taskforce administered a questionnaire survey to Yokohama Rubber employees and held individual interviews with all female employees, striving to clarify female employees' needs with respect to returning to work. The individual interviews with female employees enabled the Task to learn how female employees approach their careers, what concerns they have about balancing their careers with childcare or nursing care responsibilities, how it feels to be a working mother applying for short-time working system and other concerns and ideas that female employees have; these interviews helped to clarify the need for new systems that will permit the realization of diversified work styles.

On the basis of the above information, Yokohama Rubber's basic policy on women's participation and advancement in the workplace has been set as: "Aiming to be a company that welcomes diverse workstyles, with an employee-friendly working environment that will encourage employees to serve long term." We have been implementing various measures aimed at fostering the exchange of views and enhancing communication so as to contribute to the building of employee-friendly workplaces in which women can continue their careers for an extended period, including the holding of working mothers gathering and study seminars to deepen understanding of health issues that affect women in particular, etc. Following a trial implementation period, April 2018 saw the formal adoption of three new workstyle systems: the Working from Home System, extension of duration for the Short-Time Working System the Reduced Working Hours Extension System, and the Career Return System.

In the future, Yokohama Rubber will continue its efforts to create an employee-friendly working environment, by enabling employees to take annual leave in hourly units, expanding the scope of the flextime working system, etc., so that, within a working environment that supports diversity, individual employees can maximize their potential and create outstanding results.



The Women's Participation and Advancement Taskforce has been established to help create a more employee-friendly working environment

### VOICE

### Women's Participation and Advancement Taskforce Leader



**Machie Wakabayashi**  
Taskforce Leader, Women's Participation and Advancement Taskforce, Corporate Planning Division

By holding interviews with female employees and with managers who supervise female employees, the Women's Participation and Advancement Taskforce has been able to access a wide range of approaches and ideas, and to hear employees' real opinions. Although interviewing directly every individual female employee took a great deal of time and effort, it has helped to strengthen our understanding of the wide range of different ways that women approach their career, and the needs to support different workstyles; I believe that the information we have collected will be very useful when formulating new policy measures in the future.

Based on the results obtained from these activities, starting from fiscal 2018, Yokohama Rubber has gradually begun to introduce new systems and frameworks. Placing a particular focus on the areas of childcare, nursing care, and women's career continuity, for which needs were particularly high, Yokohama Rubber is adopting a proactive approach towards the formulation of guidelines for each stage from applying for childcare leave to returning to work, towards the implementation of surveys and interviews – targeting all employees – regarding nursing care responsibilities, and towards the holding of various types of seminars for female employees and managers.

### Systems for supporting an employee-friendly working environment

- Working from home
- Extension of reduced working hours for employees with childcare responsibilities
- Career return support
- Enabling employees to take paid leave in hourly increments



**We nurture values accommodating diversity in the workplace and in the community at large**



**[Results of initiatives]  
Percentage of newly-recruited employees on the management career track who are female**

**32.5%**

(Employees recruited in April 2017, non-consolidated)

## TOPIC

### Making effective use of IT to realize more efficient work styles

As part of our efforts to create an employee-friendly workplace environment, Yokohama Rubber is working to further the effective utilization of information technology (IT). We are actively promoting the adoption and utilization of tools that will allow all employees to realize more efficient working styles. Starting from fiscal 2017, we have been deploying new business chat tools that facilitate more effective communication. By comparison with conventional e-mail-centric communication, these new tools allow employees to contact one another more rapidly, thereby contributing towards making business operations more efficient. We have also launched a BYOD (Bring Your Own Device) initiative whereby employees can check company e-mail and schedules on their own personal smartphones, which can contribute towards boosting productivity by enabling employees to make more effective use of small blocks of free time. While these types of tools have many convenient and useful functions, a lot of employees do not know how to make full use of them, so we are implementing regular seminars and training sessions to share practical ideas on how to use these tools can be used in day-to-day business operations.

We have also started to use social media within the enterprise; as home working (telecommuting) becomes more common, it will be increasingly difficult to bring employees together face-to-face in the workplace, so by putting in place new methods of communication, we are helping to ensure that operations can continue to proceed smoothly.

In implementing these various initiatives, we are working to ensure close coordination between operational departments, the HR department and the labor unions, so as to provide effective support for the enhancement of employees' work styles.



IT training in progress

## VOICE

### A user of the Working from Home System



**Ryota Miyatsu**  
Business Innovation Task Force,  
IT & Management System Planning Dept.

In October 2017, I started working from home once or twice a month on a trial basis. The main objective was to identify any IT-related issues that might affect employees working from home on a regular basis. The thing that struck me about working at home was that it has definite advantages, because not wasting time commuting helps you to work more effectively, and because you can focus more on your work due to not being interrupted all the time. By making use of web-conferencing and chat tools, you can still communicate with your supervisor and with colleagues without any real problems. I made a particular effort to eliminate any potential communication problems by using different communication tools for different purposes. One problem is the need to have an environment at home where you can concentrate on your work in the same way that you can in the office. I found that it is important to make a preparation to the desk and chair that you use at home so that you can keep working at your desk for long periods, and to make sure that the family members you are living with understand that you need to focus on your work. In addition, in order for this type of work arrangement to be adopted more widely, I think it is very important to secure the understanding of other people in the workplace. As I am assigned to a department that is striving to make effective use of IT to make work more efficient, I have been working actively to provide feedback on the results of this trial project, and I hope to be able to put forward some proposals for improving the IT environment to provide a higher level of convenience.

## People

# Build on each other's strengths: Creating workplace environments that make working easier for all employees



### Providing support for the participation and advancement of persons with disabilities (YPS)

Yokohama Peer Support Co., Ltd. (YPS) is Yokohama Rubber's special subsidiary, which was founded in March 2012 with the aim of creating employment for people with disabilities.

YPS has recruited more people with disabilities every year since its establishment, while at the same time expanding the scope of work available to them. Currently, YPS has 51 employees in total, of which 28 have intellectual disabilities. The work that YPS employees with disabilities perform includes cleaning work at the Hiratsuka Factory – cleaning a total of over 150 toilets, meeting rooms, rest areas, etc. – as well as greening work in the Factory grounds, sorting and delivering mail and internal mail, and managing Factory employees' work clothes, etc. Work is allocated in line with individual employees' specific preferences and needs; a special focus has been placed on human talent cultivation, with adjustments having been made to the system so that, as the scope of work handled by individual employees expands, they are eventually able to provide guidance to new employees, etc., providing a sense of achievement. The non-disabled YPS personnel who undertake the provision of guidance are mainly former Yokohama Rubber employees; by providing considerate, helpful guidance on a daily basis, they strive to create a working environment in which the disabled employees can carry out their work with peace of mind. Besides daily discussion meetings, individual interviews are held every six months to find out about employees' career hopes, expectations, worries, etc.; in this way, YPS endeavors to increase the employee retention rate.

In the future, YPS will continue its operation as a professional team that emphasizes safety and fundamental needs, while also aiming to create a workplace environment in which disabled employees can develop their career over the long term.



As YPS marks the sixth anniversary of its founding, YPS employees aim to continue the company's growth as a team that undertakes its work in a highly professional manner



### Employment of disabled persons overseas (CHZY)

Starting from 2006, Hangzhou Yokohama Tire Co., Ltd. (CHZY) – which is located in the Hangzhou Economic and Technological Development Area (HEDA), Hangzhou City, Zhejiang Province, China – has been responding to the Chinese government's initiatives by adopting a more proactive approach towards the employment of disabled people. CHZY currently has 22 disabled persons working at the company.

The work that each disabled employee performs is arranged in accordance with the individual employee's capabilities, through liaison with the human resources department and general affairs department, and includes work such as data collation, preparation of process-related signboards for use within the factory, etc. Within the workplace, disabled employees receive training in technical skills as well as safety and environmental awareness training. The company also organizes outdoor activities and parties on a regular basis, to provide opportunities for the disabled employees to develop friendly ties with other CHZY employees. These efforts by CHZY have been well received; in fiscal 2017, CHZY was honored as a "Disabled Persons Model Employer" by Hangzhou Municipal Government. In the future, CHZY plans to continue expanding the range of roles and work content available to disabled employees on the basis of careful evaluation of individual suitability, with the aim of ensuring that all human resources are able to maximize their potential. The goal is that, by arranging work that suits the talents of each individual, employees' self-confidence and self-esteem can be enhanced, making CHZY a company in which all employees are able to maximize their potential.



A "5S" notice-board created by disabled employees working together, with the aim of helping to create a cheerful, happy workplace  
\*5S: A workplace organization methodology based around the "5Ss": Sort, Set in order, Shine, Standardize and Sustain

**We build workplaces and a society  
in which a wide range of human  
talent can maximize their potential  
with peace of mind**



**[Results of initiatives]  
Disabled persons employment rate**

**2.18%**

(Combined total for Yokohoma Rubber Co., Ltd.,  
Yokohama Tire Japan Co., Ltd.,  
Yokohama Rubber MB Japan Co., Ltd.,  
and Yokohama Peer Support Co., Ltd.  
during the period April 2017 – March 2018)

## TOPIC

### Female employees to management positions in overseas Group companies

Yokohama Rubber is engaged in creating a working environment that enables employees with motivation and ability to participate fully, and in which every individual employee can maximize their potential.

In Yokohama Rubber's overseas operations, there are already some regions where women's advancement in the workplace is already proceeding rapidly, with many female employees working enthusiastically in managerial positions.

#### VOICE

#### A female manager working in Thailand



**Jirinee Huabnarin, Senior Manager,  
Human Resources and General Affairs  
Yokohama Tire Manufacturing (Thailand) Co., Ltd. (YTMT)**

While women only account for around 20% of all employees at YTMT, in the Human Resources and General Affairs Department the figure is approximately 70%, with 32 female employees. Of the 18 people working in our office, 15 are women. There is no gender-based discrimination in the recruitment process; it is just that women tend to be better at data compilation, which is painstaking work that requires careful attention to detail, so we have ended up with a high percentage of women. In Thailand, employees usually don't have to work a lot of overtime, and every member of the family helps to look after the children, so whether or not you have children doesn't really affect your work. I think that if I have children in the future, I will probably be motivated to work even harder for the sake of my family. Working in the Human Resources and General Affairs Department, we sometimes have to tell employees things that they don't want to hear, but there is also a more pleasant side, for example when we hold birthday parties for employees and all get together to celebrate with them. I enjoy being able to work knowing that I can have full confidence in my subordinates. When I was first promoted to a managerial position I was a little hesitant about it, but now I found that having that increased sense of responsibility gives me extra motivation in my work. In the future, I will continue to do my utmost as the manager of my department.

#### VOICE

#### A female manager working in China



**Tong Dan, Deputy Plant Manager (left); Ren Xuanqun,  
Department Manager, Administration Department (right)  
Yokohama Industrial Products - Hangzhou Co., Ltd. (YIP-HZ)**

**Ren Xuanqun:** As departmental manager of the Administration Department, I am responsible for general affairs, human resources, public relations (including liaison with government agencies and local government authorities), legal affairs, etc. When I was promoted to departmental manager I was overjoyed; it encouraged me to work even harder so as to achieve good performance and live up to the trust that had been placed in me. Every day, we recite the safety messages, and we attach great importance to ensuring employees' safety and their physical and mental health. In the future, I hope to continue making a positive contribution to the company by demonstrating effective care for employees (being kind when appropriate, and stern when necessary), and by working to enhance my own management capabilities.

**Tong Dan:** YIP-HZ manufactures hose and automotive sealing materials. When I was promoted to manager, I was pleased that the company thought highly of me, but at the same time I also felt a certain amount of pressure. Initially, it was very hard, but over time we have been able to build a real team spirit by sharing ideas for improvement. In line with our company's goal of becoming the "number one factory in the world for safety and quality," I am working to strengthen employees' awareness of the importance of quality, and of how improved quality leads to greater peace of mind.



## Earn the confidence of our neighbors: Contributing to safety at the local level



Training conducted with Hiratsuka School for the Visually Impaired (wheelchair user evacuation)

### Contributing to the building of safe local communities

The Hiratsuka Factory has signed a disaster response collaboration agreement with Kanagawa Prefectural Hiratsuka School for the Visually Impaired, which is located adjacent to the Factory, for the purpose of providing mutual assistance in the event of natural disaster; the Hiratsuka Factory and the School hold joint disaster response training activities.

The first joint disaster response drill was held in 2006; as of December 31, 2017, these joint drills had been held on 16 occasions. The collaboration between the Hiratsuka Factory and the Hiratsuka School for the Visually Impaired has taken various different forms, including the construction of an emergency exit to provide direct access between the School and the Factory, and the holding of seminars to train the School's teachers in the use of fire extinguishers and automated external defibrillator (AED) equipment, as well as teaching CPR. The Hiratsuka Factory employees participating in these activities were able to learn the important points to remember when helping disabled people to evacuate in an emergency situation, and while taking part in the disaster response drill they took great care to ensure that they would not be injured.

Every time the joint drill is held, it provides a useful opportunity for identifying issues that need to be resolved. Given that the holding of these activities enables Yokohama Rubber to meet the needs of the local community, we intended to continue implementing disaster response related initiatives in the future.



Traffic safety rule awareness-raising activity using mini-games

### "Safety starts with me" traffic safety awareness-raising

Yokohama Tire Vietnam Inc. (YTVI) has been carrying out traffic safety awareness-raising activities since 2016. In February–March 2017, we implemented a safety sticker distribution activity targeting truck and bus drivers, using the slogan "Let's get home safely."

YTVI provided sponsorship for soccer classes that a total of 650 children took part in. After soccer practice, commemorative group photographs were taken with the children holding various types of flags that had awareness-raising messages on them. YTVI also distributed photo holders with safety message printed on them for the children to put the commemorative photos in. Chanting the safety messages helped to reinforce the memories that the commemorative photos will embody for the children while also helping them to realize the importance of traffic safety.

A high percentage of traffic accidents in Vietnam involve young people, so it is important to create as many opportunities as possible for young people to develop a correct understanding of traffic safety rules and learn how to drive safely. With this aim in mind, YTVI organized a mini-game activity in collaboration with a local shopping mall that is visited by large numbers of families and young people, targeting children and, particularly, teenagers. The aim was to create an opportunity to learn traffic safety rules in a fun way. There were also demonstrations by YTVI staff on proper tire usage, and opportunities for people to have their photo taken with the Yokohama Tire mascot. A total of around 1,000 adults and children participated in this awareness-raising activity.

### Earthquake/tsunami evacuation drill planned in collaboration with Hiratsuka School for the Visually Impaired (approximately 100 participants)

#### Providing support for earthquake evacuation training



"Injured" student being carried by stretcher

#### Providing support for earthquake/tsunami evacuation training



Guiding students up the stairs

#### ● Primary evacuation drill content

With a drill scenario based on the assumption that an earthquake had occurred, the drill involved evacuating wheelchair-bound students and "injured" students from the 3rd Floor of one of the school buildings to the 1st Floor (ground floor) level.

#### ● Secondary evacuation drill content

With a drill scenario based on the assumption that the school buildings had collapsed, the drill involved helping the students to evacuate from the School to the nearby Multi-purpose Park.

#### ● Tsunami evacuation drill content

With a drill scenario based on the assumption that a tsunami had occurred, the drill involved evacuating wheelchair-bound students from the 1st Floor (ground floor) level of the one of the school buildings to the 3rd Floor.

In fiscal 2016, a new drill activity was implemented for the first time on a trial basis; this involved guiding students to evacuate to the Hiratsuka Factory's Administration Building on the assumption that a tsunami had occurred.



**We earn the confidence of neighbors  
through robust community  
engagement**



**[Results of initiatives]**

**Traffic manner guidance for local  
elementary school implementation rate**

**100%**

(All domestic production sites in Japan  
(non-consolidated), 2017)



Seminar on proper tire usage, with instruction by YTVI employees

**activity (YTVI)**

#### Comments from people who participated in YTVI's traffic safety campaign activities

##### Soccer event

● For my son, who wants to be a soccer player when he grows up, this was a great opportunity. The commemorative photo taking will have helped to get him thinking about traffic safety from a young age, and the activity also provided our family with some great memories. (Father)

##### Shopping center event

● I learned how important it is to always stop at a red light, and that children need to be wearing safety helmets too when they are riding on a motorbike or scooter. (Teenage girl)

● I am grateful for having had the opportunity to learn about the important things to note when changing your tires, which I hadn't really known until now. (20 years old male)



Activity participant carrying a commemorative photo bearing traffic safety messages

## TOPIC

### YOKOHAMA Magokoro Fund



Yokohama Rubber established the YOKOHAMA Magokoro Fund in May 2016, with the aim of providing support for NPOs, NGOs etc. that are working to address social challenges including environmental conservation activities and human rights, etc., as well as contributing to disaster relief funds.

Yokohama Rubber employees who wish to donate to the Fund become Members; they make fixed monthly donations in multiples of 100 yen, which is deducted directly from their salary. Through this system, employees who may have felt that "I would like to start participating in social contribution activities, but I don't know where to start," or "I don't have enough free time to participate in volunteering activities" can easily participate in social contribution activities. As of April 2018, the YOKOHAMA Magokoro Fund had a total of 1,817 Members, and had provided a combined total of 2,142,000 yen donations for 11 projects organized by 7 different organizations, as well as contributing a combined total of 2,450,977 yen (including donations made in foreign currencies, converted into Japanese yen) to 5 disaster relief funds. In recognition of employees' willingness to contribute to society, Yokohama Rubber matches the same amount for each donation made from the Fund, thereby supporting employees' social contribution activities.

#### [List of organizations that have received disbursements from the Yokohama Magokoro Fund]

##### ● IKAW-AKO Japan-Philippines Partnership for Environmental Protection Inc. (Specified Nonprofit Corporation)

Environmental protection activities in the Philippines, including tree-planting activities and "3Rs" (Reduce, Reuse, Recycle) awareness-raising activities, etc.

##### ● AFS Intercultural Programs, Japan (Public Interest Incorporated Foundation)

International exchange activities for senior high school students to promote cross-cultural understanding.

##### ● Groundwork Mishima (Specified Nonprofit Corporation)

Implementation of environmental conservation activities and environmental education activities aimed at restoring the original natural landscape of Mishima, the "Land of Water."

##### ● ChildFund Japan (Specified Nonprofit Corporation)

Sponsorship program to help ensuring that children living in poverty in countries such as the Philippines can grow up healthy.

##### ● Japan Environmental Action Network (JEAN) (General Incorporated Association)

Activities to raise awareness of the problem of marine debris and environmental conservation activities to restore and protect the rivers and seas.

##### ● The Hyogo Institute of Assistive Technology (Hyogo Assistech) (Social Welfare Corporation)

"Children's Myoelectric Prosthetic Hand Bank" program, which aims to help create a "universal well-being society."

##### ● Katariba (Approved Specified Nonprofit Corporation) (Onagawa Kougakukan facility)

Provision of educational facilities for children who were affected by the Great East Japan Earthquake of 2011, and provision of related educational support activities.

Corporate Governance

Products

The Earth

People

Community

## Earn the confidence of our neighbors: Contributing to improving lives in local communities



### Providing healthcare support for local communities in collaboration with NPOs (YTPI)

Yokohama Tire Philippines, Inc. (YTPI) recognizes the importance of the Philippines government's 10-point Socioeconomic Agenda and of Goal 3 of the UN Sustainable Development Goals (SDGs) – Ensure healthy lives and promote well-being for all at all ages – and implements activities that provide direct support for local communities.

In July 2017, volunteers from YTPI accompanied healthcare professionals acting as doctors' assistants to provide free medical examinations and free medicines for local residents in the hilly Target district. Examinations were provided for 258 patients, exceeding the original target of 200. The YTPI volunteers worked together with the medical team; the volunteers were mainly responsible for patient registration, showing patients where to go, personnel assignment management, etc. Some Japanese trainees who have been undergoing training at YTPI also assisted, by distributing drinks etc.; this activity really helped to strengthen ties with local residents and their children.

In September 2017, YTPI launched a 60-day food aid program in collaboration with an elementary school in the Sapangbato district. This activity is conducted every year, in response to an appeal by the Philippines' Department of Health, to address the problem of malnourishment among children, particularly those living in remote areas.

YTPI's CSR team provided the targeted children with nutrition kits that included bowls, spoons, forks, and bottled foods and beverages, as well as multivitamins, etc. By checking the children's weight once a week, the team is also able to monitor their growth.

YTPI has been implementing this food aid program on an annual basis with the aim of helping children to live healthy, happy lives; in the future, YTPI will continue its efforts to make a positive contribution to local communities.



Some of the women who participated in the program

### Female employment program targeting nearby villages (ATG)

The majority of women living in India's rural areas marry young and then focus on looking after their families as housewives.

The ATG Tires Tirunelveli Plant (ATG-TN) carried out a survey to find out what kind of occupational skills women living in nearby villages would like to acquire. The survey results showed that 90% of the women were interested in learning tailoring, which is a job that can be carried out at home while also doing the housework. ATG-TN launched a 50-session training program to help women in nearby villages who had not previously had any opportunity to acquire tailoring skills learn how to make clothes. Registration began in 2016, with 15 women participating initially. On each training day, trainees received practical instruction between 10:00 a.m. and 1:00 p.m., after which they had the option of staying at the training center to practice on their own or receive further guidance from the instructors.

The program was implemented once again in 2017, with a further cohort of 15 trainees. The women who have completed the program are now able to make a wide range of clothes, from children's clothes to ladies' underwear and outdoor clothing, and are able to make clothes to order for their immediate family members, other relatives, and other villagers, which provides them with an additional source of income. Animated by a strong desire to be able to provide their immediate family, other relatives and other villagers with clothes made according to the designs they want using good-quality materials, while working from home, all of the participating trainees completed the course. Some of the most-skilled trainees have now become teachers themselves, teaching other people how to make clothes.

Several of the trainees were family members of ATG-TN employees; by providing a way for more members of the same family to earn an income, ATG-TN has been able to win the trust of local villagers. Program participants have expressed an interest in learning how to make more colorful clothes with more complex designs, and ATG-TN is evaluating ways to help them realize this goal.



**We earn the confidence of neighbors  
through robust community  
engagement**



**[Results of initiatives]  
Community activity and dialog  
implementation rate at our production sites**

**100%** (2017, consolidated)

**Percentage of business locations paying  
salaries that exceed the minimum wage**

**100%** (2017, consolidated)

## VOICE

### Female employment program participants



#### Women who participated in the program

- I didn't know anything about tailoring before; I was very excited by the idea of learning how to make clothes by myself, and I made sure that I attended every training session without missing a day. I have purchased a sewing machine and materials, and am now making clothes for family members and friends after discussing with them what kind of clothes they want. It's great, because I can do the work during periods of free time between housework tasks.
- I was really eager to learn tailoring, because it is a job that I could do at home. When there was anything I didn't understand, the instructors were very helpful and patient. In the past I always bought ready-to-wear clothes, but they didn't always fit properly, and designs weren't very good, so I am really happy that I can now make clothes that my family and other people in the village will like.
- If someone wants clothing based on an original design, I make a sample and discuss it with them. Currently, I am using a foot-powered sewing machine, so I have to work carefully. It would be great if, in the future, I was able to use an electric sewing machine to make the types of clothes people want.



Design sample

## TOPIC

### Donating toilets to an elementary school

Around 80% of the children who attend the Map Yang Porn Elementary School near Yokohama Tire Manufacturing (Thailand) Co., Ltd. (YTMT) have parents who work in the Amata City Industrial Estate, where YTMT is located. As the Industrial Estate has developed, the number of children attending the Elementary School has grown rapidly, resulting in a shortage of classrooms and toilets. To help tackle this problem, YTMT joined forces with two other Japanese-owned companies and began constructing new toilets adjacent to the school buildings in April 2016; the completed toilets were formally donated to the school in September 2016. Besides men's toilets and ladies' toilets, there is also a restroom for the physically challenged. The new toilets are used not only by the schoolchildren, but also by other local people such as to play soccer on the school grounds on weekends.

When the toilets were being constructed, YTMT donated the funds needed to buy construction materials, and YTMT employees who expressed an interest in helping with the project painted and decorated the toilet walls. The area near the toilets has been landscaped using flower-beds made from tires, and the walls were decorated with pictures and messages painted by YTMT employees.

YTMT is continuing to provide support for Map Yang Porn Elementary School on an ongoing basis; for example, in 2015 YTMT donated play equipment made from tires to the school.

In addition, YTMT organizes a variety of activities for schoolchildren and other local residents, including traffic safety classes, etc. When planning these activities, YTMT's Thai employees play an active role by considering what kind of activities would be most appreciated by the local community.



The donated toilets



Play equipment  
made from tires

# Yokohama Rubber Group at a Glance / Financial Indicators

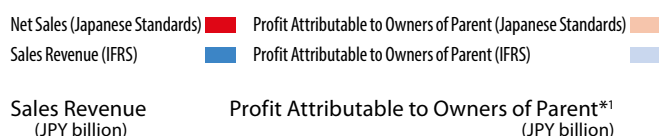
(as of December 31, 2017)

\* Consolidated financial statements prepared based on International Financial Reporting Standards ("IFRS") from the 142nd fiscal period (transition date of January 1, 2016)

(Consolidated)

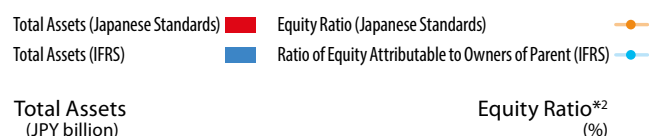
	December 2016 (141st fiscal period)	December 2017 (142nd fiscal period)
Number of employees	24,610	25,439
Number of applicable subsidiaries	135	137
Sales revenue (JPY million)	574,048	646,272
Profit before tax (JPY million)	24,076	54,891
Profit attributable to owners of parent (JPY million)	9,362	39,975

## Net Sales (consolidated) and Profit Attributable to Owners of Parent



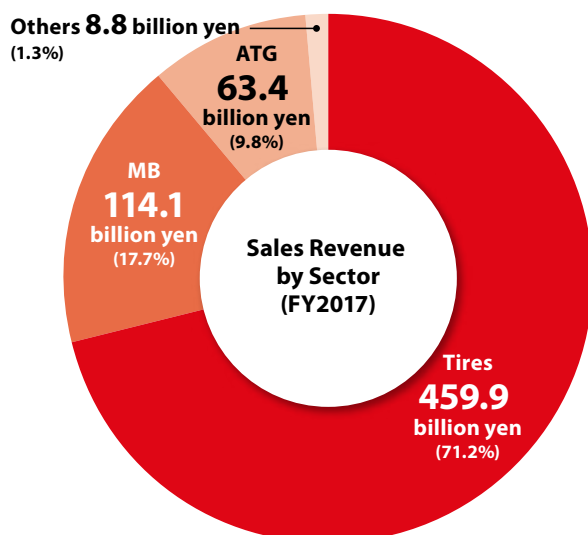
\*1: Profit Attributable to Owners of Parent under IFRS

## Total Assets and Equity Ratio (consolidated)

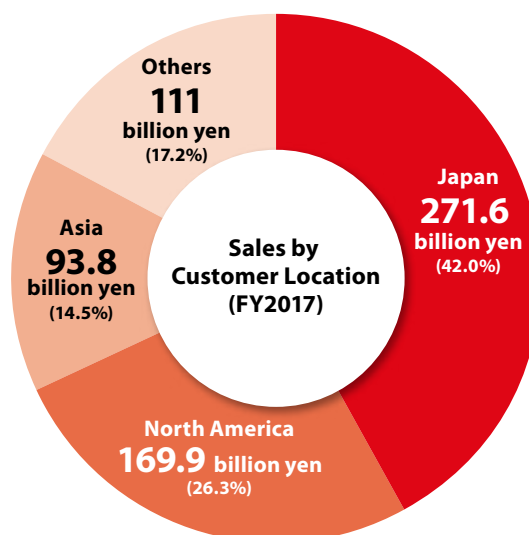


\*2: Ratio of Equity Attributable to Owners of Parent under IFRS

## Sales Revenue by Sector

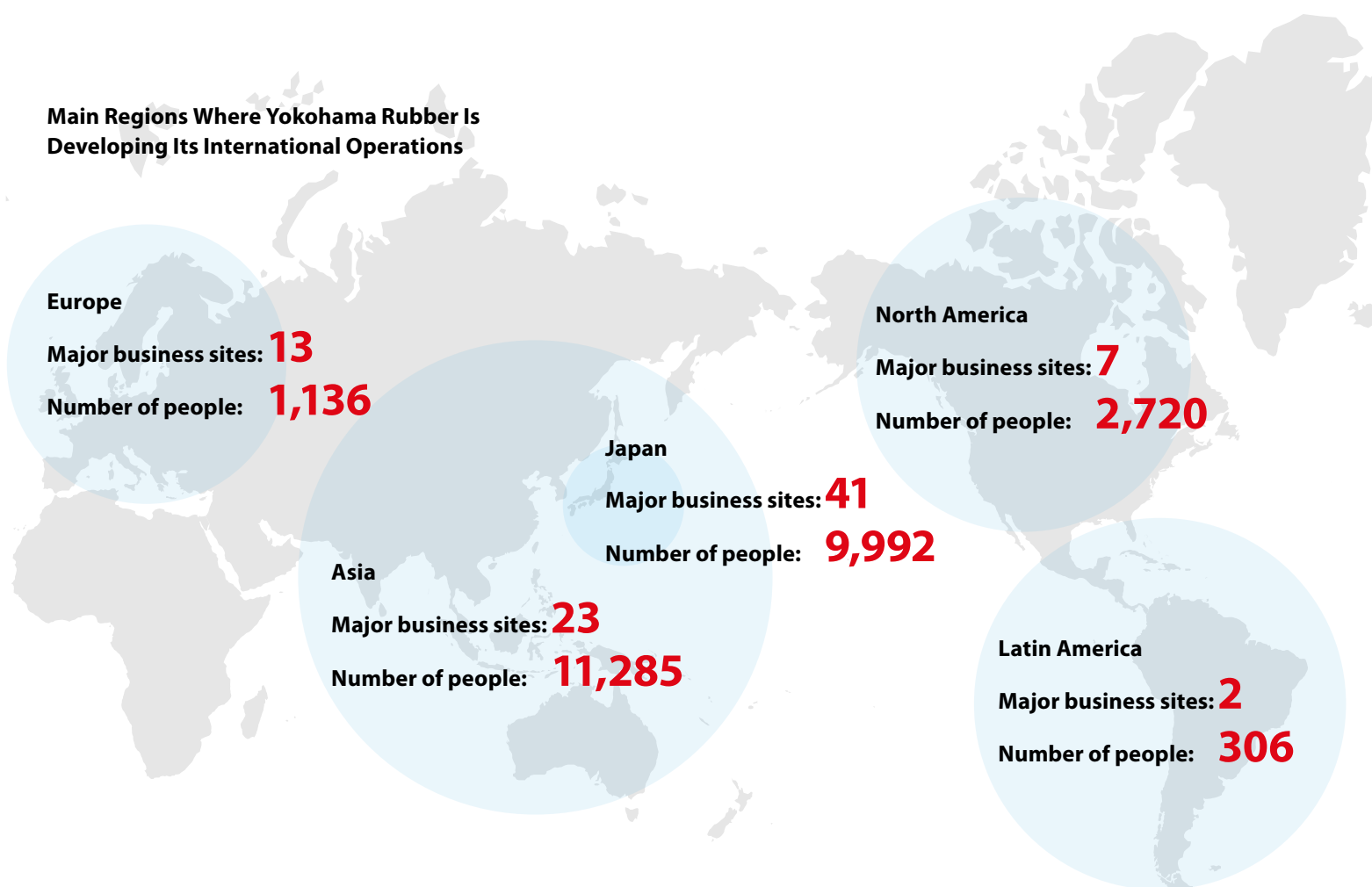


## Sales by Region





## Main Regions Where Yokohama Rubber Is Developing Its International Operations



## Major Affiliates

(By region)

Europe	Japan	US and Latin America
Yokohama Europe GmbH	Yokohama Tire Japan Co., Ltd.	Yokohama Corporation of North America
Yokohama Industrial Products Europe, GmbH	Yokohama Industrial Products Japan Co., Ltd.	Yokohama Tire Corporation
Alliance Tire Europe B.V.	Alliance Tire Group K.K.	Alliance Tire Americas Inc.
Yokohama Industrial Products Italy S.r.l.	Aichi Tire Industry Co., Ltd.	Yokohama Tire Manufacturing Virginia, LLC.
LLC Yokohama R.P.Z.	Yokohama Tire Retread Company Limited	Yokohama Tire Manufacturing Mississippi, LLC.
Yokohama Russia L.L.C.	Yokohama Rubber Marine & Aerospace Co., Ltd.	Yokohama Industries Americas Inc.
Asia (other than China)	PRGR Co., Ltd.	Yokohama Industries Americas Ohio Inc.
Yokohama Asia Co., Ltd.	HAMAGOMU AICOM INC.	Yokohama Industries Americas Mexico S. de R.L. de C.V.
Yokohama Tire Philippines, Inc.	Hamagomu Fudousan Co., Ltd.	Yokohama Aerospace America, Inc.
Yokohama Tire Manufacturing (Thailand) Co., Ltd.	Yokohama Peer Support Co., Ltd.	
Yokohama Rubber (Thailand) Co., Ltd.	China	
Y.T. Rubber Co., Ltd.	Yokohama Rubber (China) Co., Ltd.	
Yokohama India Pvt. Ltd.	Yokohama Tire Sales (Shanghai) Co., Ltd.	
Alliance Tire Company Ltd	Hangzhou Yokohama Tire Co., Ltd.	
ATC Tires Private Ltd.	Yokohama Industrial Products – Hangzhou Co., Ltd.	
Yokohama Tyre Vietnam Inc.	Suzhou Yokohama Tire Co., Ltd.	
Yokohama Industrial Products Asia-Pacific Pte. Ltd.	Shandong Yokohama Rubber Industrial Products Co., Ltd.	
PT. Yokohama Industrial Products Manufacturing Indonesia		

# External Evaluation

Yokohama Rubber is included in the FTSE4Good Series, the FTSE Blossom Japan Index, and the MSCI Japan ESG Select Leaders Index. The FTSE4Good Index is an influential reference for investors who are interest in environmental, social, and governance (ESG) performance in allocating equity investment, and Yokohama has been part of that index continuously since 2005. The FTSE Blossom Japan Index and the MSCI Japan ESG Select Leaders Index, meanwhile, are two of the three indexes that Japan's Government Pension Investment Fund (GPIF) adopted on July 3, 2017, as benchmarks for ESG performance.



## FTSE4Good Series

This is an ESG index provided by the major global index provider FTSE Russell, which is a wholly-owned subsidiary of the London Stock Exchange Group that configures and manages indices.



## FTSE Blossom Japan Index

FTSE Russell configures and manages the FTSE Blossom Japan Index as a benchmark for ESG performance at Japanese corporations.



## MSCI Japan ESG Select Leaders Index

MSCI Japan ESG Select Leaders Index is an index of shares of Japanese corporations created by the US company MSCI Inc. that supplies research-based indexes and portfolio analytics to the world's leading investors.

## List of awards received in FY2017

Name of award or certification	Organizer	Business location awarded	Reason for selection
FY2017 Circular Resource Techniques and Systems Award Encouragement Award	Japan Environmental Management Association for Industry	Yokohama Rubber Ibaraki Plant	Achieved efficient resource recycling through efforts to reduce production and disposal volumes of resin mold materials for hose manufacturing at the Ibaraki Plant * A related article is available on page 16.
Logistics Environmental Special Award	Japan Federation of Freight Industries	Yokohama Rubber/ Hamagomu Logistics	Contributed to reductions in CO <sub>2</sub> emissions, countermeasures in response to the shortages of truck drivers, and the alleviation of crowding in port districts through round use with multiple shippers (exports) for tire imports from Thailand, the Philippines, and China
Good Design Award iceGUARD 6 passenger vehicle tires GEOLANDAR M/T G003 mud terrain tires for SUVs and pickup trucks	Japan Institute of Design Promotion	Yokohama Rubber	In recognition of qualities including outstanding design and performance, and outstanding convenience from the perspective of users
2017 NTDA Tyre Industry Awards "Industry Marketing Campaign of the Year"	National Tyre Distributors Association (UK)	Yokohama H.P.T. Ltd. (YHPT)	For making an appeal for the importance of tire safety to tens of thousands of soccer fans through the use of digital technologies and the Internet, including the use of electronic billboards that display safety awareness messages at home games of Chelsea FC in the English Premier League that Yokohama Rubber serves as an official partner for and also sending safety messages through YHPT and Chelsea FC SNS
TyreSafe Awards 2017	TyreSafe (UK)		
Our project was certified as General Social Survey Project.	State Council of the People's Republic of China	Ecological protection project supported by Yokohama Tire Co., Ltd. (China)	Ecological conservation project (conservation of the ecosystem by allowing a mountain village to shift from an economy that had been dependent only on felling of trees to agricultural and livestock production) in the Laojun Mountain Nature Reserve in Lijiang, Yunnan Province that Y-CH has supported since 2011 has been certified by the Chinese government as a project with the highest possibility of success for environmental conservation * The Chinese General Social Survey is a survey that plays an important role in Chinese policy decision. CSR Report 2016 (P19-20) contains an article related to this project. Back issues of the Yokohama Rubber CSR Report are available from the CSR website.
Acquired certification as Office in Harmony with Nature®	Association for Business Innovation in Harmony with Nature and Community (ABINC)	Yokohama Rubber Hiratsuka Factory	In recognition of biodiversity activities that include holding and recording regular bird observation events on the premises, implementation of ongoing researches on the fixed quantity of CO <sub>2</sub> absorption as monitoring of the changes accompanying the growth of the trees planted on the premises, river conservation activities in Hiratsuka City (monitoring of water quality, aquatic life, birds, and vegetation, removal of foreign species, and cleaning activities), tree planting activities, and sapling donation activities.

# Summary of Third-party Opinion

This opinions has been written based on the contents of this report, interviews held with people at Yokohama Rubber, and field observation.



IIHOE

## Hideto Kawakita

CEO and Editor/Publisher of Socio Management International Institution for Human, Organization and the Earth (IIHOE)

IIHOE:

The International Institute for Human, Organization and the Earth is a non-profit organization established in 1994 for the democratic and balanced development of all the lives on the earth. Although it mainly provides management support for citizens' groups and welfare workers, the group is also heavily involved in providing CSR support to large corporations.

### Truly Commendable Areas

Conservation of biological diversity: Planted over 520,000 trees in the Yokohama Forever Forest Project, and has provided seedlings both in-house and to other companies. I look forward to the evolution of the multi-language portal site.

### While Approving of Progress, Areas that May Require Further Improvement

- Reduction of environmental impacts: Achieved target of 100% for products that feature environmentally friendly technologies. Usage ratio of regenerated rubber improved by 2.3%. I look forward to the thorough visualization of issues and methods including participation in the development of load reduction technologies for the vulcanization process, the adoption of just-in-time systems for energy, and increased energy conservation at the use stage.

- Improvement of workplaces' ability to retain employees: 6.60% of Yokohama Rubber employees took advantage of various systems in order to care for a child or family member in need. Yokohama Rubber continued to

hold nursing care seminars and conduct employee questionnaires. I look forward to the establishment of an environment that allows employees to continue working while on leave.

- Enhancement of the human resource portfolio: An employee from an overseas subsidiary has been assigned as a Corporate Officer. I look forward to the specification and prompt development of next generation management posts at the Head Office based on the long-term targets in anticipation of the 2020s.

- Employment of persons with disabilities: An employment rate of 2.18% has been achieved for the Group in Japan. I look forward to the prolongation of continuous service in cooperation with sales and marketing support companies.

- Employee safety: Countermeasures have advanced in response to major accidents at business sites overseas. The expansion of on-site safety management and safety governance and detailed reports on progress are required.

- CSR at suppliers: I commend the continuation of CSR workshops, feedback on the results of self-checks, the commendation system, and the support for the promotion of agroforestry in Thailand. I look forward to more detailed evaluation of items in checklists and the establishment of systems for interaction.

### Areas that May Require Further Improvement

- Corporate governance and CSR promotion system: I have concerns that no KPI have been set and the value creation story is unclear. I look forward to the top management clearly and specifically communicating in their own words on the necessity for CSR measures, and for the development of a strategy and system assuming a business model in the global market in the 2020s.

- Reports and communication: There were no opportunities for ongoing engagement at main business locations. I look forward to improvements in the timeliness of non-financial information disclosure in order to build a trusted identity.



Appassionata, Inc. President and Consultant

## Joanna Sook JaPark

Appassionata was established in 2000 to promote a work-life balance and diversity. Appassionata has supported many companies with human resources development and awareness reform in areas such as unconscious prejudice, diversity, and telework (working from home).

Based on the slogan of "Caring for the Future", Appassionata creates value in cooperation with stakeholders.

**Ideal working environments:** I commend listening to the feedback from the people involved in task activities, understanding needs, and the introduction of systems including those for telework as efforts that have led to a reduced employee turnover rate. I look forward to measures in the future that allow employees to realize their capabilities while being engaged in rewarding work.

In addition, I commend the employment of people with disabilities over the statutory ratio and the provision of environments that allow people with disabilities feel reassured in working, including the holding of individual

interviews on a regular basis. I look forward to further expansion in the work areas for people with disabilities to deepen interaction with general employees and promote the understanding of diverse human resources.

**Education and training:** I commend the ongoing efforts to raise awareness of CSR in various forms of human resources training and the deepening of a common awareness and positive relationships with business partners at CSR workshops. I also commend efforts to create safer local communities, such as ongoing joint emergency drills with schools for the blind and learning about evacuation guidance consideration for people who are blind.

**Yokohama Tire Philippines:** The percentage of full-time employees is high, and the turnover rate (8%) is also below the regional average (15%). As the women in management percentage is also 30% and three of seven management positions are locals and two are women, I commend the active participation of diverse local human resources. The Yokohama Rubber parent company could learn from this diversity of leadership. In addition, the fire that occurred last year is being used as a lesson, and efforts are being made towards employee safety and disaster prevention including regular firefighting and evacuation drills.

I hope that the company achieves a balance between business development and social contribution over the next 100 years as well while putting into practice "Yokohama Rubber core values", the unique qualities of Yokohama Rubber.

## Response to Third-Party Opinion

We will make even further efforts in areas where we have received positive feedback, and we will make sincere improvements in response to suggestions and recommendations regarding our CSR initiatives.

The Yokohama Rubber Group is focusing on overall safety inspections, facility improvements, and safety awareness raising activities Group-wide, and we will make even further efforts going forward. In addition, we will make ongoing improvements in working environments so that people in diverse environments can work healthily and soundly over the long term. We hope to further

deepen ties with local communities through activities such as the Education Forest Project.

Under the GD2020 medium-term management plan that aims for sustainable growth over the next 100 years, we will further strengthen corporate governance and solidify trust from society based on the CSR Slogan "Caring for the Future".

Officer, Head of Corporate Social Responsibility Division  
**Shigetoshi Kondo**



## The Yokohama Rubber Co., Ltd.

36-11, Shimbashi 5-chome, Minato-ku, Tokyo  
105-8685, Japan

### Corporate Communications Department

Tel. +81-3-5400-4531

### Corporate Social Responsibility Planning Department

Tel. +81-3-5400-4705



Yokohama Rubber is a signatory to the United Nations Global Compact.  
Yokohama Rubber is an advocate of Fun to Share, a climate change program working to realize a low-carbon society.  
Yokohama Rubber Group is an official partner of Chelsea F.C.