



Contributing to Reducing Environmental Impact

Relevant material issues	Initiatives
 Products	<ul style="list-style-type: none"> • Manufacture and sell tires and industrial materials with advanced safety, quality and environmental performance • Manufacture and sell carbon neutral products • Develop biomass rubber and promote retread tires • Manufacture and sell industrial products that contribute to greenhouse gas reduction
 The Earth	<ul style="list-style-type: none"> • Achieve carbon neutrality in our own activities by 2050 • Sustainable material usage rate of 100% by 2050 • Reach 1.3 million cumulative trees planted in YOKOHAMA Forever Forest Activities by 2030 • Sustainable natural rubber procurement • Coexistence and shared prosperity with agroforestry farming method promotion and rubber farmers • Roll out activities to preserve biodiversity at production sites

Basic Approach

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

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

Yokohama Rubber Basic Environmental Policy

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

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

Three Pillars of Environmental Issues

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

	Medium-to-long-term goals and the road map for achieving them
Carbon Neutrality	<ul style="list-style-type: none"> • 2030: 38% reduction (compared with 2013 levels) in CO₂ emissions from our own activities • 2050: Net zero CO₂ emissions from our own activities
Circular Economy	<ul style="list-style-type: none"> • 2030: At least 30% renewable/recycled raw material usage • 2050: 100% sustainable raw materials
Coexistence with Nature	<ul style="list-style-type: none"> • YOKOHAMA Forever Forest Activities: Cumulatively, 1.3 million trees planted, and saplings provided by 2030 • Promotion of sustainable natural rubber procurement • Biodiversity preservation activities compatible with local ecosystems

Initiatives to Achieve Carbon Neutrality

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

overseas by 2050. As a company-wide activity beyond production sites, we will continue to implement 1% annual in-house improvement activities that promote improvements and revisions to facilities, equipment and transportation processes.



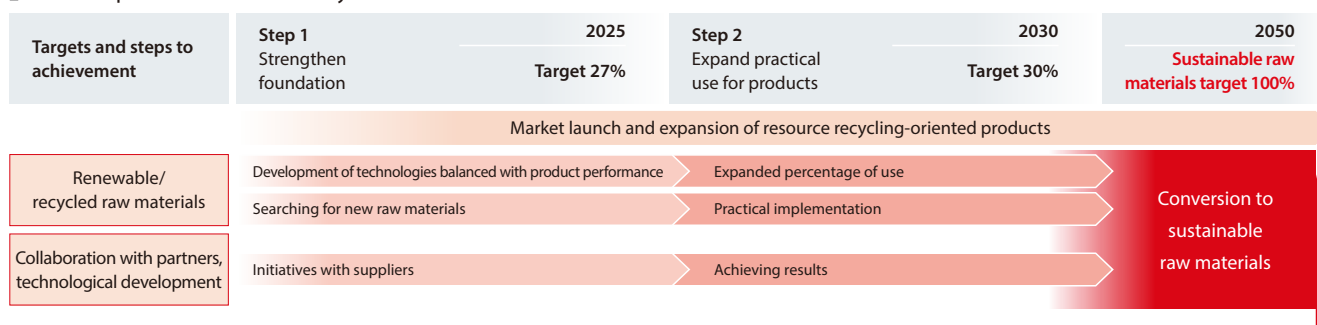
Mishima Plant

Initiatives to Tackle the Circular Economy

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

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

➤ Roadmap to a circular economy



Use of sustainable raw materials/recycled raw materials

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

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

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

(Outline of the project)

(1) High efficiency butadiene synthesis from ethanol

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



Butadiene produced from biomass

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

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

Supplying racing tires made with sustainable materials

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



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

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

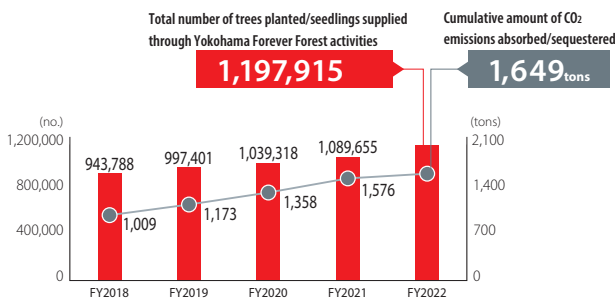
* A method that allows products to be assigned the same biomass-derived characteristics according to weight as they are in the processing and distribution process from raw materials to products. Products assigned biomass-derived raw materials are regarded as biomass-derived products, regardless of the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

Contributing to Reducing Environmental Impact

Initiatives for Co-existence with Nature

Yokohama Forever Forest Activities

To implement sustainable business activities, corporate management must seek to consider natural capital and conserve biodiversity. YOKOHAMA Forever Forest is a company-wide afforestation activity launched in 2007 in preparation for Yokohama Rubber's 100th anniversary in 2017 with the aim of curbing global warming and preserving the ecosystem. We planted trees at 14 sites in Japan and 21 sites in 8 countries overseas, achieving our target of 500,000 trees in September 2017. We have continued these activities since 2017, when the target was achieved, and as a result of calculating the fixed amount of carbon dioxide in YOKOHAMA Forever Forest from a survey of seedling growth, it is estimated that the entire area of planted forests had absorbed 1,649 tons of CO₂ by the end of 2022. Going forward, we will continue our activities at each of our domestic and overseas bases, targeting a total of 1.3 million trees planted and seedlings supplied by 2030.

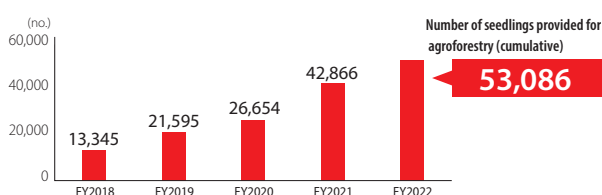


■ Cumulative number of trees planted/seedlings supplied
● Cumulative amount of CO₂ emissions absorbed/sequestered

Promoting procurement of sustainable natural rubber

Initiatives for agroforestry

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



* Number of seedlings provided in fiscal 2022: 10, 220

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

Initiatives in Surat Thani in southern Thailand

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



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

Participation in external initiatives toward a society of symbiosis with nature

In January 2023, Yokohama Rubber endorsed the philosophy of the Task Force on Nature-Related Financial Disclosures (TNFD) and participated in the TNFD Forum. Also in January 2023, we joined the 30by30 Alliance for Biodiversity. This alliance is a coalition of companies and other organizations working to achieve "30by30," an international goal of conserving and protecting more than 30% of land and sea by 2030.



Biodiversity monitoring (Ibaraki Plant)

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

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

Initiatives for water resources

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

Yokohama Rubber's 3Rs of water initiatives

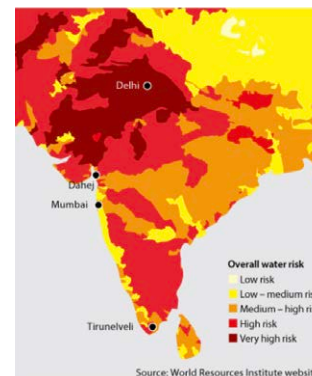
REDUCE	REUSE	RECYCLE
<ul style="list-style-type: none"> Reduce usage Recharge aquifers 	<ul style="list-style-type: none"> Use rainwater Effectively reuse wastewater Increase water quality of wastewater 	<ul style="list-style-type: none"> Recycle water Return water to withdrawal source

Assessing water risks and reducing water intake

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

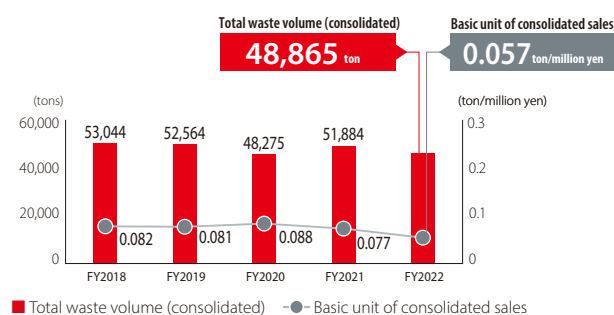
In fiscal 2022, total water intake (consolidated) amounted to 8,247 thousand m³, a 2.9% decline from the previous year, of which 65% was in Japan and 35% overseas. We continuously prevent leaks, improve equipment for use of recycled water, and make effective use of water at all business sites. In particular,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

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



Reduction of waste volume and thorough management of PCB wastes

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



Future Issues and Measures

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

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