Hiratsuka Factory (HP)

Business activities
Design, basic research, development and evaluation of aircraft parts, sporting equipment, adhesives and sealants, conveyor belts, marine hoses, fenders and other industrial products

Total site area
285,794 m2 (including Adhesives and Sealants Plant)

Number of employees
2,306 (as of November 2020)

Location
2-1, Oiwake, Hiratsuka City, Kanagawa 254-8601, JAPAN

Contact for consultation and complaints
General Affairs Group, Hiratsuka Factory Tel: +81-463-35-9501 Fax: +81-463-35-9746

Message from the General Manager

Takashi Shirokawa

While continuing to serve as a “base for the dissemination of technologies and monozukuri manufacturing expertise throughout the Yokohama Rubber Group,” the Hiratsuka Factory is also aiming to be a “factory that maintains the affection and unwavering trust of both customers and the community,” in line with Yokohama Rubber’s CSR Vision. Within this strategic framework, in the environmental sphere the Hiratsuka Factory is focusing in particular on reducing leakage and noise pollution, which can have a pronounced negative impact on the local environment, to zero, while in regard to safety the Hiratsuka Factory will be striving to eliminate accidents that are serious enough to require employees to take time off work, by ensuring that everyone who works at the Hiratsuka Factory puts safety first; in addition, as a factory belonging to a company that plays a key role within the automotive industry, the Hiratsuka Factory will also be seeking to reduce road accidents in which people are injured to zero. In terms of disaster prevention, we are working to improve the level of fire and disaster prevention based on our internal guidelines, and to build a BCP to prepare for disasters as a priority issue.

Furthermore, in every aspect of our business operations our actions will embody not only strict adherence to compliance-related regulations, we also act with the motto of "coming home with a smile every day" with an awareness of compassion for people, customer satisfaction, employee satisfaction and social contribution.

In fiscal 2020, the "Think Eco Hiratsuka Event" was changed to a panel presentation of our activities in the midst of COVID-19, with an emphasis on environmental protection and the SDGs. Local residents were able to see our ongoing environmental activities.

The Yokohama Forever Forest Project activity, which was launched in 2007 with the aim of helping to safeguard the local environment and fostering a mutually-beneficial relationship with local communities, reached its 14th year of implementation last year. The approximately 30,000 tree seedlings that were planted within the Hiratsuka Factory’s grounds have grown into an impressive forest. We are continuing to cultivate tree seedlings, which we donate free of charge for use in local tree-planting activities and other environmental events, etc.

By continuing with such activities in the future, we want to strengthen awareness of the Hiratsuka Factory as a business located within Hiratsuka City which seeks to make a positive contribution to regional development.

Organizational Governance

Publicizing and sharing policies and issues

In that it represents a combined location, the Hiratsuka Factory hosts multiple business departments, production plants and R&D facilities. Close attention is thus paid to thoroughly publicizing policies and issues that involve the entire factory. We also strive to improve communication.
The publicizing of General Manager directives as well as safety and environment policies is done through factory-wide morning meetings. Meanwhile at factory meetings held each month, the General Manager personally shares factory issues and topics, etc. with all department managers.

Improved functionality through management systems

Concerning safety and environment issues involving the entire factory, both the Safety and Health Administration Office and the Environmental Management Administration Office coordinate with different factory units, and we are implementing effective operation of OSHMS and ISO 14001 management systems. Rather than relying solely on external audits, the Internal Audit Department executes our accounting audits, and we follow up on any stipulated exceptions or required improvements. Pursuing such actions can be linked to the strengthening of factory functionality.

Labor Practices

To achieve thorough statutory compliance, each month we decide on a theme such as forms of harassment or personal information management, etc., and then we conduct compliance education within each business unit. In addition to improving employee knowledge and consciousness of such topics, we are endeavoring to create a friendly workplace.
To realize suitable working hours, we have established a forum where both labour and management can check and discuss topics such as working hours, holidays and overseas business trips, etc. And the top management of labor and management patrols the proper management of working methods.
In much the same vein, discussions are held between labour and management to annually improve the work environment, with such improvements being promoted by us.
Through such responsiveness, we are taking care to create a working environment in which employees can feel peace of mind.

Promotion of gender equality

In fiscal 2020, the ratio of female staff in career-track positions stood at 20.6%.
We will continue to promote the hiring of female employees and promote work-life balance through the use of childcare leave and shorter working hours, the use of hourly paid leave system, flextime system and telecommuting system.

Promotion of employment of people with disabilities

As of the end of December 2020, the employment rate of persons with disabilities was 3.33%.
We will continue to promote the employment of people with disabilities and work to create a workplace environment where people with disabilities can work with vigor and enthusiasm.

Occupational safety and health management

Since the Hiratsuka Factory acquired Occupational Safety and Health Management System (OSHMS) certification in July 2010, we have conducted OSHMS-based occupational safety and health management. This work has been mainly built around continuous risk assessment and KY (Hazard Prediction) activities, etc.
When new operational processes are introduced or changes are made to existing operations, we hold “open work observations,” which allow many employees to witness work practices and identify hidden risks. We do this so as to further work improvement that makes work practices even safer.
Furthermore, we comply with safety and health statutory requirements, and proactively promote both employees’ acquisition of qualifications and educational activities. We also work to develop human resources and prevent disasters.

Traffic Safety

In order to reduce the number of traffic accidents, we provide traffic safety guidance and conduct road safety seminars for all employees twice a year. Each month, we conduct traffic safety education and other activities at each workplace.
Furthermore, we have designated the first day of every month as "Traffic Safety Day" at the Hiratsuka Plant, and are enhancing the traffic safety awareness of all employees through broadcasts within the plant. We are aware of our responsibility as a company that plays a part in the automotive industry, and are working to prevent traffic accidents.

Health management

We follow up to ensure that 100% of our employees receive the various medical examinations required by law, including regular medical checkups and special medical checkups.
We also provide mental health care to employees who have concerns about their work or life by offering counseling opportunities by professional counselors.

The Environment

Environmental management

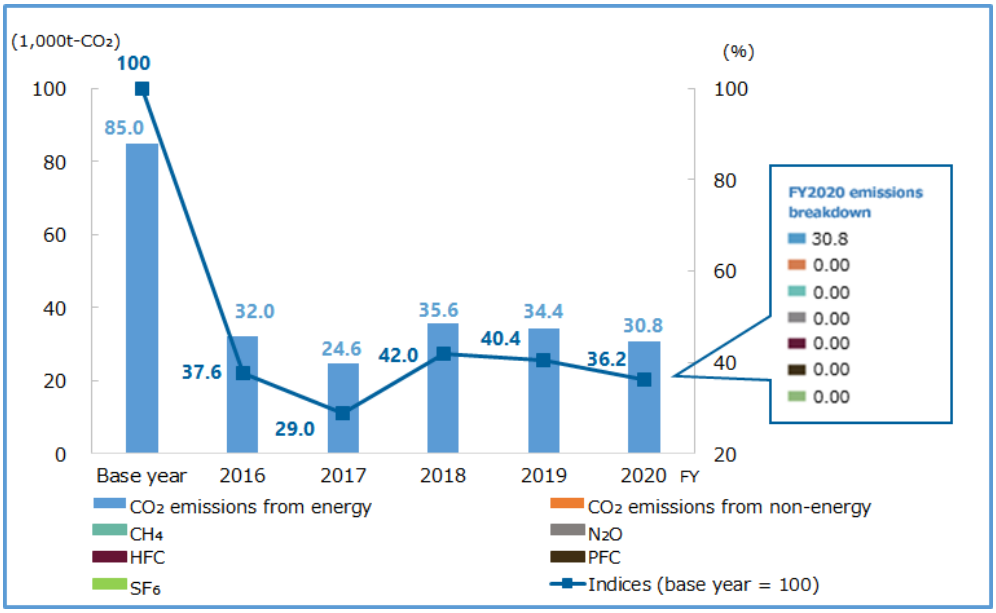
The Hiratsuka Factory continues to operate environmental management based on ISO 14001 environmental management system certification, which was acquired in July 1999.
From fiscal 2012, it converted to an environmental management system integrating the entire company as one site of Yokohama Rubber. We will continue to deploy activities based on the company-wide environmental policy.
As the Hiratsuka Factory holds a wide range of business organizations, from plants with different production methods to the technical research and development department of the entire company, it divides them into 9 environmental blocks to advance daily environmental improvement activities under the Hiratsuka Factory Environmental Policy in compliance with the company-wide environmental policy.

Environmental data

Reduction of greenhouse gas emissions

Greenhouse gas emissions

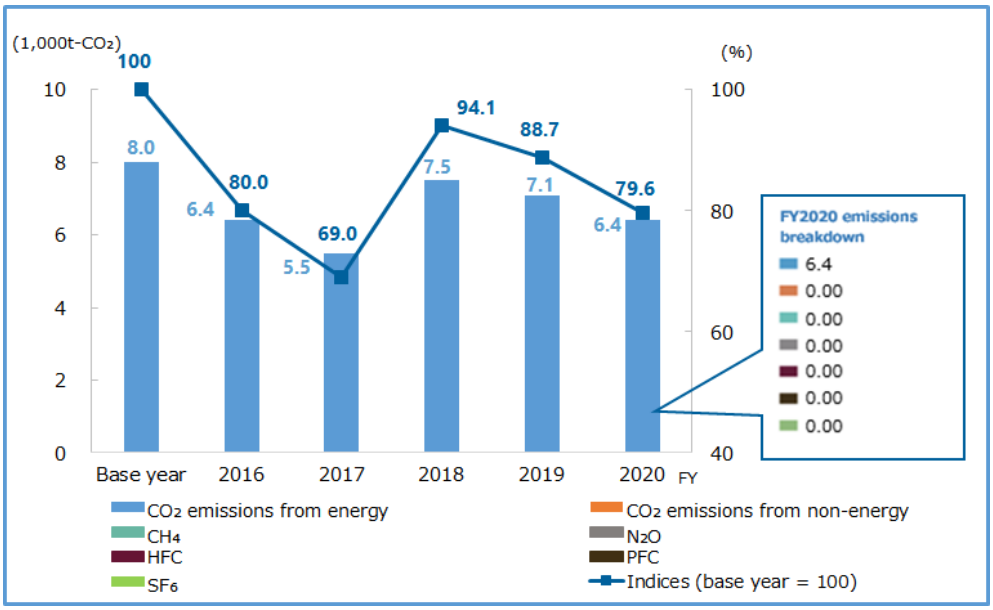
Hiratsuka Factory



※The base year is defined as 1990 except for HFC, PFC and SF_6, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
Note that GHG emissions associated with purchased power in FY2009 were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

Adhesives and Sealants Plant



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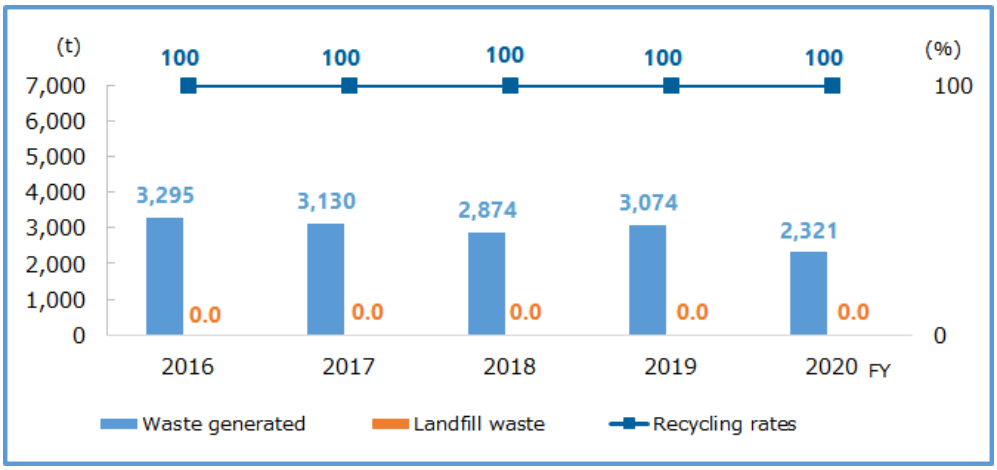
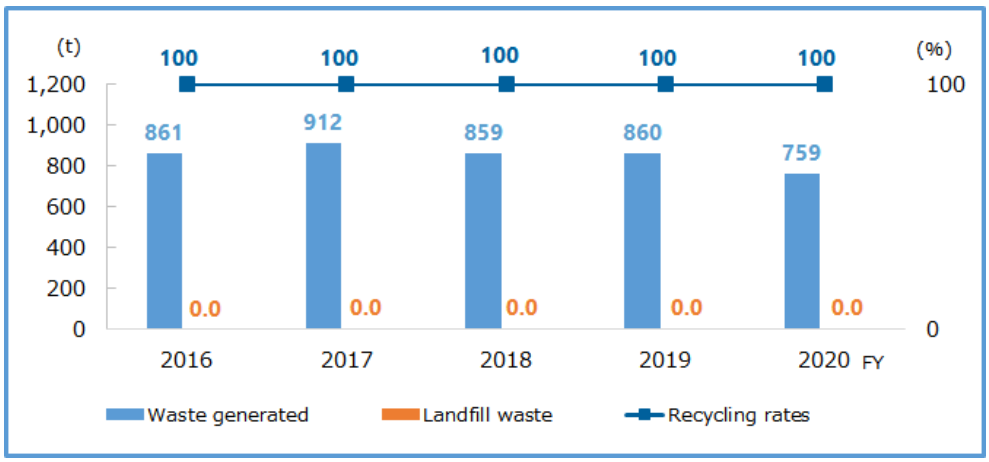
Effective use of resources / Reduction of waste

Waste output

Hiratsuka Factory

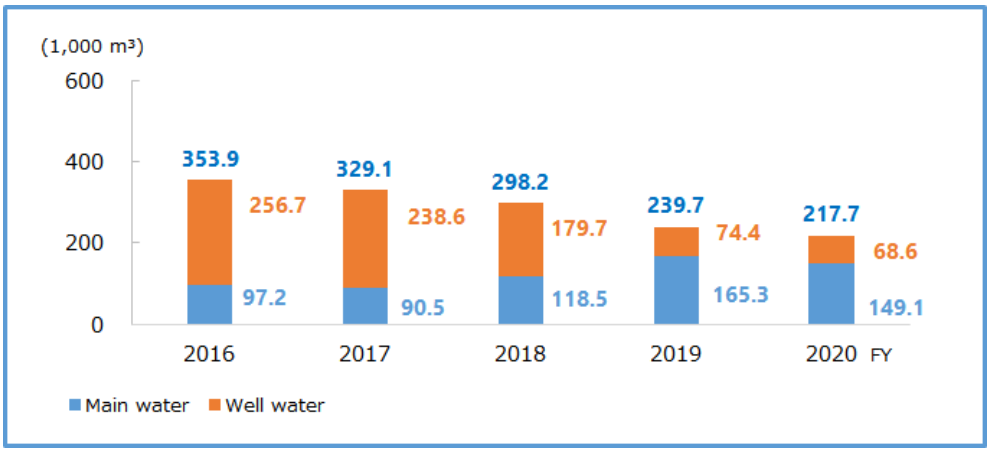


Adhesives and Sealants Plant



Water Usage

Hiratsuka Factory (including the Adhesives and Sealants Plant)



Measures for discharges into water, air and soil

Data related to water contamination

Drain	Item	Regulatory values	Voluntary standard values	FY2020 results		
				Average	Maximum	Minimum
Hiratsuka Factory	pH	5.0～9.0	5.91～8.7	7.5	8.5	5.4
	BOD concentration (mg/l)	600	430	123	420	17
	SS concentration (mg/l)	600	190.0	61	160	26
	Animal and plant oil concentration (mg/l)	30	15.0	4	12	1
	Mineral oil concentration (mg/l)	5	2.5	1	2	1
Adhesives and Sealants Plan	pH	5.0～9.0	7.4～8.8	8.3	8.7	7.8
	BOD concentration (mg/l)	600	300	58	210	11
	SS concentration (mg/l)	600	300	65	280	17
	Animal and plant oil concentration (mg/l)	30	15.0	3	9	1
	Mineral oil concentration (mg/l)	5	2.5	1	1	1

※In accordance with the Hiratsuka Municipal Sewerage Ordinance.

Air pollutants (NOx, SOx)

Substance	NOx emissions (t/year)	SOx emissions (t/year)
Hiratsuka Factory	3	—
Adhesives and Sealants Plant	0	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 results		
				Average	Maximum	Minimum
Hiratsuka Factory Boilers 1	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	23.0 5.4	24.0 5.5	22.0 5.3
Hiratsuka Factory Boilers 2	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	24.0 5.2	24.0 5.4	23.0 5.0
Hiratsuka Factory Boilers 3	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	26.0 5.0	26.0 5.3	25.0 4.8
Hiratsuka Factory Boilers 4	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	24.0 5.1	24.0 5.2	24.0 4.9
Hiratsuka Factory Boilers 5	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	26.0 4.7	26.0 5.0	25.0 4.5
Hiratsuka Factory Boilers 6	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	24.5 5.2	25.0 5.3	24.0 5.2
Adhesives and Sealants Plant Boiler 1	Nox (ppm) Soot and dust (g/h)	150 180.2	31.6 90.1	20.5 0.6	22.0 0.6	19.0 0.6
Adhesives and Sealants Plant Boiler 2	Nox (ppm) Soot and dust (g/h)	150 180.2	75 136.14	16.0 0.6	19.0 0.8	13.0 0.4

※In accordance with the Air Pollution Prevention Law and Kanagawa Prefectural Ordinance.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Hiratsuka Factory verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS)requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Pollution prevention

We have established self-administered values that are even stricter than regulated targets so as to strictly observe all environmental laws and ordinances concerning air pollution, water contamination and noise, etc. We take steps to monitor and measure these values.
Furthermore, to ensure that no sensory discomfort resulting from noise, vibrations and odors, etc. is caused to neighborhood residents, we have established monitoring points outside the factory grounds and are working to prevent such issues.
With respect to PCB waste within the factory, it is suitably handled in accordance with the relevant laws and regulations.

Use of sustainable resources

We are taking steps to reduce overall volumes year-on-year by placing a top priority on the goals and targets of the ISO 14001 management system with respect to reductions in industrial waste, organic solvents, greenhouse gas emissions and water usage.

Alleviating and adapting to climate change

In the “Energy-Saving Month” of February and the “Environment Month” of June, in addition to establishing important measures relating to core business areas and reporting on the energy-saving results achieved, environmental patrols are conducted by the business unit managers of each block within the factory, and through the thorough implementation of measures such as twice-weekly mandatory times for leaving work, we are working to reduce CO_2 emissions.

Environmental protection, recovery of natural habitats

Activities were commenced in fiscal 2013 to protect the biodiversity of the Kaname River’s water resources. The monitoring activities to study the environment of the Kaname River system have been sequentially participated in by employees on an " experiential " basis, bringing the total number of participants to 346. Up until this point, the monitoring activities have resulted in 10 or more bird species being identified, with the status of birdlife along the river being judged healthy.
Furthermore, gobies (a species of fish), mitten crabs and river shrimp, etc., were also recorded. This indicated that the area’s water-life was also healthy. At the same time, the high degree of clearness of the water pointed to a state of eutrophication. We are also now proceeding with an evaluation of water quality based on a scoring of the caddis-fly, dragonfly and mayfly larvae numbers found along the river.

A further point is that, concerning the flora found along the river, exuberant growth was noted of introduced species such as ragweed and burr cucumber. It was also confirmed that indigenous species have been in retreat. After obtaining the agreement and collaboration of local government authorities and local organizations, starting from fiscal 2014 we have been implementing, on an ongoing basis, an activity to eradicate introduced plant species from specific sections of the river, and to monitor the changes in the flora found along the river.

Starting from fiscal 2015, with the aim of helping to conserve the Kaname River's water resources and restore the local satoyama (traditional community-managed forest) landscape to its original condition, we undertook conservation activities, in collaboration with members of local environmental organizations and with local university researchers, that included leasing an area of land (which had formerly been under cultivation but had been allowed to become overgrown) within the boundaries of Hiratsuka City, clearing the brush etc. that had grown up on the land, and creating a biotope habitat by hand, as well as monitoring the subsequent changes in the ecosystem.

Starting from fiscal 2017, a dragonfly pond was created within the grounds of the Hiratsuka Factory, to create an environmental activity location that is closer to home; observation is undertaken of the way the dragonflies and other creatures living in the pond interact with each other.

In recognition of these biodiversity conservation activities, as well as on the basis of the carbon capture surveys etc. conducted in relation to the growth of the Yokohama Forever Forest tree plantings undertaken in the vicinity of the Hiratsuka Factory since 2007, in March 2017 the Hiratsuka Factory was certified as an Association for Business Innovation in Harmony with Nature and Community (ABINC) biodiversity-friendly factory.

Biodiversity (vegetation) survey

Biodiversity (river) survey

Outpatient vegetation removal

Participant

Forest conservation activities (removal of hikobane flies)

An Akiakane (Japanese dwarf fox) in the dragonfly pond

ABINC logo mark

Fair Operating Practices

Impartial and fair selection of business partners

To ensure the fair selection of business partners, we conduct surveys when choosing new suppliers to verify whether any private interest exists between the company in question and our own employees.
In addition, for the first time, as a response to COVID-19, we sent study materials to suppliers at the CSR study meeting for them to study voluntarily and confirmed their responses through an electronic questionnaire.

Establishment of a “Procurement Code of Conduct” and its thorough implementation

With the “Basic Procurement Policy”, we prepared the “Procurement Ethics (Rules for Procurement Staff)” to indicate matters to be noted by procurement staff when conducting fair and impartial transactions and unethical practices that must not be engaged in. These ethics were combined with the “Basic Procurement Policy” to become the “Procurement Code of Conduct”.
We are working to ensure comprehensive awareness of compliance issues through workplace-based classes, which are held on a regular basis.

Deployment of CSR activities for business partners

For the year 2020, we explained the ESG issues we are working on with our supply chain partners, using the Green Procurement Guidelines as a theme in our CSR study meeting.
As for workplace safety, we introduced an overview of Hiyari-Hatto (near-miss) incidents and the key points to report in order to make use of them.
In addition, for information security, which has become an important issue in recent years, we introduced some examples of our own operations.
At the same time, in response to requests from our customers, we also shared information on "sustainability working together with suppliers.
Forty-seven suppliers of the Hiratsuka Factory took part in the workshop.

Consumer Issues

When purchasing stationery items that are to be used in our plants, we focus on buying products that are eco-certified and listed in the Green Purchasing Network (GPN) database.
We continue to purchase about 90% of our requirements through such means, buying sustainable products that place little burden on the environment.

Community Involvement and Development

Regional activities

We have continuously participated in volunteer activities organized by local groups, such as tree planting and riverbank cleanup, but unfortunately we refrained from such activities in fiscal 2020 due to COVID-19.

Disaster-prevention activities

Unfortunately, due to the effects of COVID-19, the annual fire-fighting competition organized by the Hiratsuka City Hazards and Safety Committee was cancelled in fiscal 2020. We also refrained from activities in cooperation with the local community, such as supporting disaster drills at the Hiratsuka School for the Visually Impaired, which is located adjacent to the Hiratsuka Factory and with which we have a disaster countermeasure cooperation agreement.
On the other hand, the annual disaster drills at the Hiratsuka Factory were conducted in the form of desktop drills to prevent the spread of COVID-19.

Regional contributions

- We continue to support Shonan Bellmare, a local J-League team, under our CSR partnership agreement.
- Once a month, employees carry out cleaning activities around the perimeter of the factory, while taking care not to make the area too dense because it is located under COVID-19.

Regional exchanges

Think Eco Hiratsuka

Unfortunately, the event was cancelled in FY2020 in consideration of preventing the spread of COVID-19, but we posted information on the activities on the fence around the perimeter of the plant for the local residents who look forward to this event to look back on the past activities and move on to the next. We

also set up a special website on our official website to disseminate information about our ECO activities both inside and outside the company.

Results of a questionnaire survey about our local communication events

In consideration of preventing the spread of COVID-19, we have cancelled the regional communication meeting.

List of FY2020 Regional Contributions / Community Activities

Hiratsuka Factory History Tour

We have decided to cancel the Hiratsuka Factory history tour in consideration of preventing the spread of COVID-19.

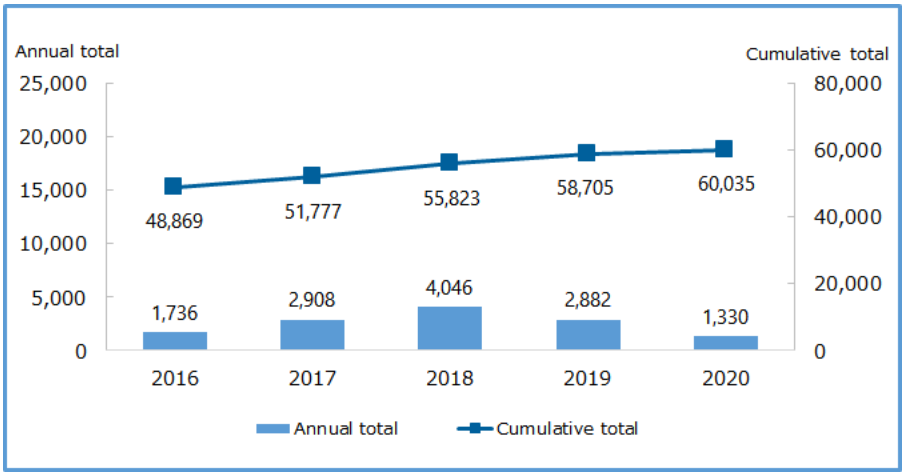
Volunteer activities

In consideration of preventing the spread of COVID-19, various volunteer activities have been cancelled or refrained from.

Provision of Yokohama Forever Forest seedlings (Total: 1,330 seedlings)

August: Donation of tree seedlings for Shinwa Gakuen Welfare Corporation (1,330 seedlings)

Number of seedlings provided by the Hiratsuka Factory for the Yokohama Forever Forest project



Support for education

The event has been cancelled due to the effects of COVID-19.

Local event support, donations, and participation

We refrained from activities due to COVID-19.

Disaster-prevention activities

We refrained from activities due to COVID-19.

Mie Plant (MP)

Business activities
Production of tires for trucks and buses, passenger cars

Total site area
264,000 m2

Number of employees
1,318 (as of December 2020)

Location
1038 Takabuku, Misono-cho, Ise City, Mie 516-8530, JAPAN

Contact for consultation and complaints
Operation Section
Tel: +81-596-28-3151 Fax: +81-596-28-3156
E-mail: katsuharu.omi@y-yokohama.com

Message from the General Manager

大楽 貢

Yokohama Rubber has established “Deal fairly with society and value harmony with the environment” as its basic environmental policy, and it aims to be “a company having world-class strengths in technologies for protecting the environment.” Our Mie Plant is located in Ise City: the divine capital located along the Miya River, Japan’s purest river. In doing business in this region, we have a strong desire to protect this abundance of nature and to continue to develop together with the community.

Since our plant’s acquisition of ISO 14001 certification in 1998, we have addressed environmental preservation through the full participation of our

employees, such activities being centered upon our environmental management systems. Concerning preservation of the environment, we have conducted ongoing improvements due to the establishment each year of objectives for reducing environmental burdens. Special activities that we can be particularly proud of include the operational improvements and reductions with respect to resource usage amounts achieved by the “Waste Elimination Force,” a group mainly comprised of female employees, and the efforts of the “Frontline Support Team,” who have helped to transform support so that we can view manufacturing sites through the eyes of the customer. Furthermore, through the activities of the “Forever Forest Project” and we have also concluded a new “Kigyo no Mori (the forests created by companies)” initiatives with Watarai Town, Watarai District, Mie Prefecture from fiscal 2021. We have been creating forests and ensuring the conservation of water sources, such factors being valuable in the reduction of CO2, disaster-prevention and the protection of living creatures. The total number of trees planted thus far reached 30,541 with the 13th planting of seedlings in fiscal 2020.
For the biodiversity conservation activities that we have been conducting since 2012, each team implemented a scaled-down version of the activities while taking measures against infection with COVID-19. Each team continued to enjoy their own activities while also preparing their own illustrated books of organisms and plants that they created.
In January 2016, we signed an agreement between Yokohama Rubber Mie Plant and Ise City regarding environmental education and have been working on it.
The tripartite collaboration of the Mie Plant's plant tour, tree-planting experience, biodiversity conservation activities, and Mie Kotsu's "Electric Bus Ride Experience and Lecture on Building a Low-Carbon Society" for five elementary schools in Ise City was abandoned due to COVID-19.

In addition, the Mie Plant employees' volunteer activities to support the reconstruction of Onagawa Town, Oshika District, Miyagi Prefecture, which started immediately after the Great East Japan Earthquake, have come to a standstill due to COVID-19.
Furthermore, the activities of local volunteers, along with those of the municipal government and residents' associations, are at a standstill.
These activities will be resumed while checking on the status of COVID-19. We will continue our efforts to be a plant that is loved and trusted by people in the region.

Organizational Governance

Thorough compliance policies

All Mie Plant employees are issued with “compliance cards” and are familiarized with the Yokohama Rubber Group compliance guidelines, and with the availability of contact points for discussing compliance-related issues.
A Compliance Committee is held, and hierarchical education is conducted.

Organizational self-corrective functions

We established a suggestions box in the plant’s cafeteria, enabling us to receive feedback from employees. In addition, the Mie branch of the labor union has established its own online consultation window for employees. Paying great attention to the views and wishes expressed through these channels, and working together with the Mie branch of the labor union, we are continuing to implement measures aimed at strengthening the sound operation of the organization.

Human Rights

Education on respect for human rights

We distribute “compliance cards” to employees to provide education on the importance of respect of human rights.

Labor Practices

The basics of safety and health

The Mie Plant obtained Occupational Safety and Health Management System (OSHMS) certification in accordance with Japan Industrial Safety & Health Association (JISHA) standards in 2006. This system is based on risk reduction and improvement activities in pursuit of intrinsic safety of equipment, as well as the creation of safe human resources with an emphasis on communication.
With respect to the safety and health policy of the plant, the basis of operation is as follows. "The basis of our corporate activities is to ensure the safety and health of our workers”, and “To prevent occupational accidents and realize workplaces where employees can work comfortably in good physical and mental health, we will prioritize the safety and health of each and every employee by appropriately and effectively implementing and operating the occupational health and safety management system together with our employees”.

Creating safe equipment

Using risk assessment methods, we are promoting the identification, evaluation and improvement of potential danger sources; we are also implementing measures that include the isolation of sources for danger from work areas and promoting the creation of people-friendly facilities.

Safety awareness

We pursue safety as a top priority under all circumstances. Specifically, we have shifted from collective guidance to individual guidance, and we conduct one-on-one safety education, dedicated safety time activities, and reviews of work procedures in open work observation.
In addition, we view successor development as a priority issue, and we are working to improve skills through various types of training.
We conduct activities suitable for the mind of each and every individual through thorough decluttering and organizing and the revitalization of communication.

Creating energetic workplaces

We give a variety of different awards even for small achievements. We do this irrespective of what job titles recipients hold. Numerous improvement suggestions from the factory floors have been successfully developed into safety enhancement measures by encouraging people to challenge themselves, rather than fear failure.
In order to prevent COVID-19, we have made it mandatory for each employee to take a temperature and wear a mask, installed disinfectant solution, implemented remote work and meetings to ensure social distance, and are reviewing work styles by taking measures such as dispersing cafeteria seating and break times.
One of the health promotion measures that we have implemented is the Quit Smoking Challenge. Starting in 2016 with a baseline level of 49.7% of employees being smokers, we have taken a series of steps since then.
We have set up a non-smoking day for three mornings in a month, and for those who wish to quit smoking, we have recommended a non-smoking clinic and received a refund of medical bills. We have also planned a six-month smoking cessation program to reduce the smoking rate to 42.2%. In 2021, we plan to continue the activities, extend the time of the non-smoking day, and make people aware of the harmful effects of smoking in order to reduce the smoking rate.

Employment of people with disabilities

Concerning the employment of people with disabilities, as part of our efforts to strengthen links with special needs schools in the area, we have accepted 3 internships in 2020, which led to the hiring of 1 person.

The Environment

Environmental management

Environmental Policy

Our goal is to embody consideration towards the global environment according to the norm of "Deal fairly with society and value harmony with the environment," which is declared in the management policy of the company.

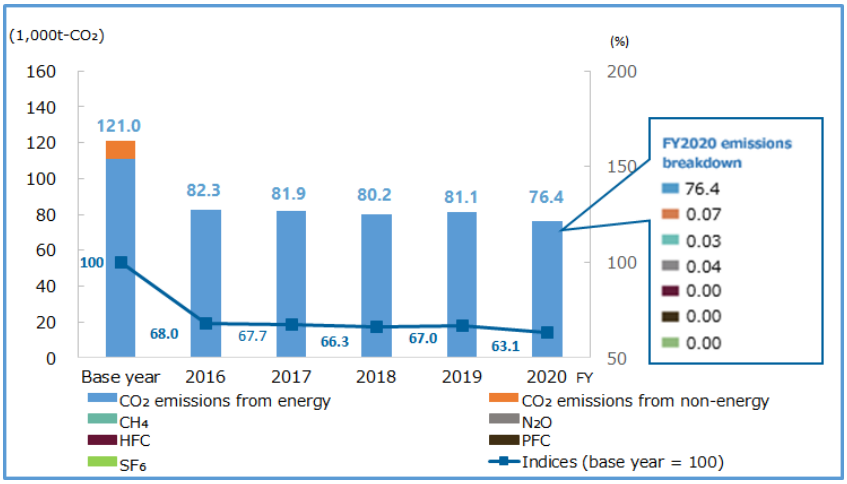
1. **The Mie Plant, under the direction of senior management, works on measures taking the environment into consideration in all areas of our business.**
2. **The Mie Plant works to deepen channels of communication with its stakeholders; it also promotes cooperation with the value chain and contributes to both the local community and society.**
3. **In order to remain trusted by the community, we appropriately implement our environmental management system and continue our efforts to prevent environmental pollution and improve the environment.In addition, we will continue to reduce our environmental impact through chemical substance management, aiming for zero environmental risk.**
4. **We observe applicable laws, regulations and agreements.**
5. **We strive to reduce emissions of greenhouse gases and conduct energy conservation activities, thereby contributing to prevention of global warming.**
6. **We strive to reduce waste output and promote recycling and reuse of resources.**
7. **To maintain biodiversity, we strive to protect and revitalize the indispensable nature of the local ecosystem and the Miya River which runs into Ise Bay, and we also participate actively in community environmental activities.**
8. **Aiming to maintain the trust of the local community by fostering harmony with the natural wonders of the divine capital of Ise, all of us working at the Mie Plant implement education and awareness raising.**
9. **We shall value information from residents when carrying out regular plant improvements.**
10. **To fully realize our environmental policy, we formulate environmental objectives and targets and draw up and implement environmental plans.**
11. **This Environmental Policy shall be made public.**

January 1, 2021
Mitsugi Dairaku,
General Manager,
Mie Plant, The Yokohama Rubber Co., Ltd.

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions



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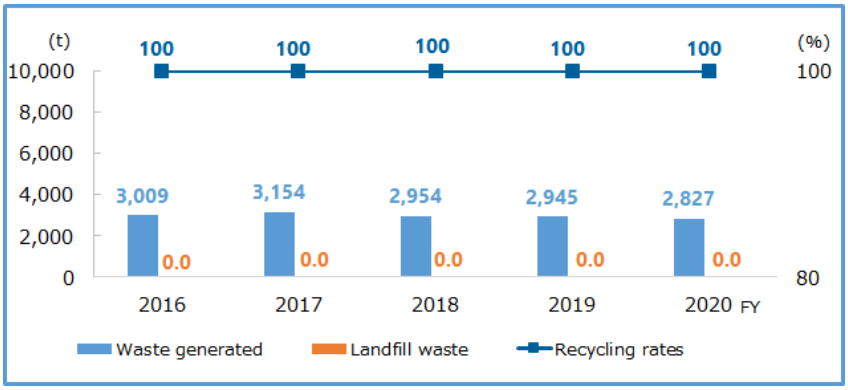
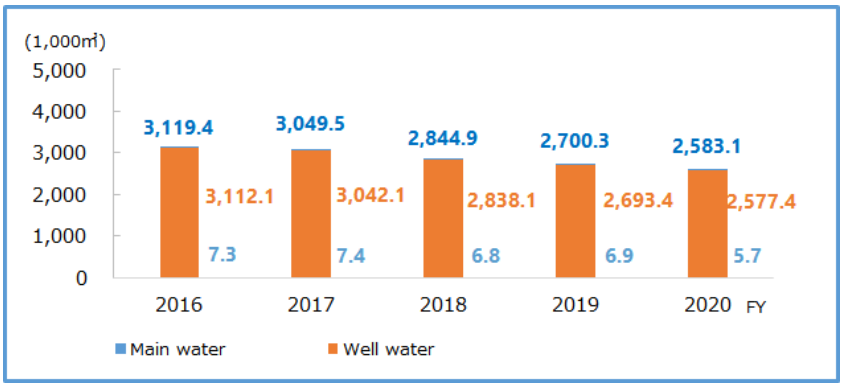
Effective use of resources / Reduction of waste

Waste output



Water usage



Measures for discharge into water, air and soil

Data related to water contamination

Drain	Item	Regulatory values	Voluntary standard values	FY2020 results		
				Average	Maximum	Minimum
Mie Plant Drain 1	pH	6.0～8.0	6.5～7.8	7.2	7.4	7.1
	BOD concentration (mg/l)	20	5	1.4	2.8	0.5
	COD concentration (mg/l)	20	5	1.9	3.3	0.9
	SS concentration (mg/l)	40	5	1.4	3.0	1
	Oil concentration (mg/l)	2	1.6	Less than 0.5	Less than 0.5	Less than 0.5
Mie Plant Drain 2	pH	6.0～8.0	6.5～7.8	7.3	7.4	7.2
	BOD concentration (mg/l)	20	5	0.6	0.9	0.5
	COD concentration (mg/l)	20	5	1.2	1.6	1.0

Mie Plant Drain 2	SS concentration (mg/l)	40	5	1	1	1
	Oil concentration (mg/l)	2	1.6	Less than 0.5	Less than 0.5	Less than 0.5

※In accordance with the Environmental Pollution Prevention Agreement concluded with Ise City.

※Discharge point: Hinokijiri River

Air Pollutants (NOx, SOx)

Substance	NOx	SOx
Amount of emission (t/year)	51	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 results		
				Average	Maximum	Minimum
Mie Plant Cogeneration 1	SOx emissions (m^3N/h) NOx (ppm) Soot and dust (g/m^3N)	3.4 100 0.05	1 90 0.01	0.43 17.7 0.0021	0.47 26.0 0.0030	0.36 11.0 0.0010
Mie Plant Cogeneration 2	SOx emissions (m^3N/h) NOx (ppm) Soot and dust (g/m^3N)	3.4 100 0.05	1 90 0.01	0.432 17.8 Less than 0.001	0.49 24.0 Less than 0.004	0.386 13.0 Less than 0.001
Mie Plant Boiler 3	SOx emissions (m^3N/h) NOx (ppm) Soot and dust (g/m^3N)	1.0 130 0.1	1 120 0.01	0.020 71 Less than 0.001	0.030 84 Less than 0.005	0.010 58 Less than 0.005
Mie Plant Boiler 4	SOx emissions (m^3N/h) NOx (ppm) Soot and dust (g/m^3N)	1.5 130 0.1	1 120 0.01	Less than 0.03 63 Less than 0.001	Less than 0.03 64 Less than 0.005	Less than 0.03 64 Less than 0.005

※In accordance with both the Air Pollution Control Act and the Environmental Protection Agreement concluded with Ise City.

Reporting on chemical substance management status

The Mie Plant verifies whether all materials handled at the plant (raw materials, secondary materials, and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed. Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

In addition, to enhance the overall level of chemical substance management, we conduct compliance verification by implementing chemical substance assessment that covers risk of adverse impact on employee health, risk of explosion or fire in relation to equipment and machinery, and environmental risk.

Efforts for Biodiversity Conservation Activities

In 2020, we were not able to hold the annual on-site class by our employees at Ominato Elementary School. We brought a picture-story show for environmental education to the Ominato Elementary School and the teacher talked about tree planting to pupils. As the Ominato Elementary School was closed and moved to a new school, the school, the local government, and ourselves are working on how to make the on-site class an issue in 2021. We will discuss how to conduct the delivery class in 2021.
Due to the COVID-19, we were not able to hold our annual tree planting and biodiversity conservation activities, but we will make preparations to hold them in 2021.
On the other hand, we are also preparing to hold the semi-annual activity report meeting in spite of the COVID-19.

Noise, vibration and odor

Noise

Noise management is implemented at the boundary of the premises of the plant (18 points) and autonomous measurement is conducted once a month.

Vibration

Vibration management is implemented at the boundary of the premises of the plant (14 points) and autonomous measurement is conducted once a month.

Odor

Odors are managed by autonomous measurements conducted twice a year at the boundary of the plant's premises. Our response involves the installation of deodorizing vaporizers in building ducting.

Comments and information from local residents from the past and our response

We have installed anti-scattering nets along the property boundaries to prevent leaves from trees on the plant grounds from being scattered by the wind to neighboring houses.

We also disinfect trees in the spring and fall to prevent insects from flying into neighboring houses every year.

Fair Operating Practices

Certification of new business partners

Guidelines are established on compliance with human rights, legal compliance, and safety and environmental activities, etc. when business is to be commenced with a new business partner. Based on such points, the approval processes for the appointment of a new procurement partner are undertaken, and interviews are conducted while various materials are referred to. It is through this process that business partners are selected.

Communication with business partners

Implementation was postponed due to COVID-19. The CSR
Study Meeting was held via the web.

Consumer Issues

Safety and quality of our products and services

Using as a pillar the principle of "creating quality through the eyes of the customer," at the Mie Plant we promote the continuous improvement of products and services by leveraging the quality management system ISO/TS 16949 (moved to ISO 9001 and IATF 16949 from June 2018) as our operational basis. We

regularly confirm the effectiveness of this system through internal systems audits and external reviews that are conducted every six months.
In addition, by using “Quality Maintenance Activities” to ensure effective self-directed quality management throughout the entire production process, etc., we position quality as customer safety while working to ensure that all employees are conscious of the “eyes of the customer” being on them.
With respect to products, we are actively working to further reduce our environmental impact by increasing the production ratio of tires with reduced rolling resistance, improved wear life, superior rehabilitation, and ultra-wide base tires.

Community Involvement and Development

Relationship with local societies

Regional exchanges

We were planning to hold the event, but it was cancelled due to COVID-19.

Social contribution activities

Due to COVID-19, we had to cancel all the various events, and we could not make donations to the Ise City Social Welfare Council or sponsor the fireworks festival, which we had done in previous years.
In fiscal 2020, blood donations were conducted three times in January, May, and October, and 107 people cooperated.

Regional volunteers

Regional volunteer activities have been cancelled due to COVID-19.

Opening of facilities

We have lent our grounds for use by a regional soccer club (ISE YAMATO).

Environmental activities

April 7: Tree planting in the 13th-1st period

Plant tour and workshop

In FY2020, due to COVID-19, elementary schools, companies, and groups in the neighborhood refrained from visiting the plant, and there were no visitors.

Please contact us below if you would like to participate in a plant tour and workshop.
Holding Day: Monday to Friday (Except for year end and New Year holidays, consecutive holidays in May and August)
Hours: 8:00 a.m. to 5:00 p.m.
Contact: Sugihara, Operation Section, General Affairs
Tel: +81-596-28-3151

Mishima Plant (SP)

Business activities
Production of tires for passenger cars, race cars and light trucks

Total site area
112,000 m2

Number of employees
943 (December 2020)

Location
8-1 Minami-Futsuka-machi, Mishima City, Shizuoka 411-0832, JAPAN

Contact for consultation and complaints
Mishima Plant Operation Division
Tel: +81-55-975-0800
Fax: +81-55-976-4322

Message from the General Manager


Toshinari Matsumoto

The Mishima Plant is located in Mishima City in the North Izu area of Izu Peninsula UNESCO Global Geopark in eastern Shizuoka Prefecture. The World Heritage Site Mt. Fuji can be seen to the north of this location that is blessed with magnificent views and abundant nature. The plant mainly manufactures tires for passenger cars and light trucks. We also produce racing tires for motor sports.

The plant is surrounded by clear water that is part of the natural abundance of Mt. Fuji and the Izu Geopark, and thanks to the tree planting of the Yokohama Forever Forest Project that the Yokohama

to see fireflies in the early summer in the tree planting areas in front of the plant in recent years. Meanwhile, residential areas have been developed in the area surrounding the plant as a result of the convenience of the proximity to the Mishima-Futsukamachi Station on the Izuhakone Railway, which means that in addition to control and management of exhaust, drainage, and sound, response to sensory issues such as odors is required, and these are being steadily addressed.

While Yokohama Rubber is aiming to contribute as a member of the global community, the plant is aiming to contribute as a member of the local community.

We would like to foster the abundant natural wealth of the region through participation in clean-up activities around the plant and the Rakujuen section of the Izu Geopark that are currently underway as well as environmental conservation and observation through environmental conservation near the IzuJukan Expressway/Tamazawa IC and biodiversity activities at the Goten River that flows along the west side of the plant.

In fiscal 2020, in response to the impact of COVID-19, we will shorten our work hours, work from home, and thoroughly implement measures to prevent the spread of infection by avoiding the three secret measures and the basic principles of gargling, washing hands, and wearing masks.

In the future as well, we will work hard to build trusting relationships with all stakeholders in an aim to be a plant that is loved by the region.

Organizational Governance

Corporate Governance and Compliance

Adhering to the vision of “deal fairly with society and value harmony with the environment” outlined in the Yokohama Rubber management philosophy, the Mishima Plant has adopted an environmental strategy that aims to make the plant a core factory of a company having world-class strengths in technologies for protecting the environment and has implemented various activities to realize this goal. In addition, with our priority issue of "reducing environmental risks and contributing to the local community while strengthening our environmental management system," we continue to promote environmental improvement through proactive management by deepening communication with stakeholders, preventing environmental and sensory pollution, and periodically reviewing past environmental problems and "near-misses.

Corruption prevention

In working to give employees a thorough understanding of our compliance policies as such relate to the prevention of quality fraud, education in compliance issues has been conducted for the entire workforce.

Human Rights

Education on respect for human rights

We distributed “compliance cards” to all employees so as to enlighten and educate them about human rights.
We offer employment irrespective of gender, age or disability.

Promotion of employment of people with disabilities and workforce diversity

Currently, we have 13 employees with disabilities.
As of December 2020, of a total of 681 employees at the plant, 36 are women, and 44 are elderly individuals (persons aged 60 or over).

Labor Practices

Occupational safety and health

Recognizing that securing the safety and health of our employees and employees of partner companies are the foundations of corporate activities, the plant acquired OSHMS (Occupational Safety and Health Management System) certification in November 2010 as a means to realize a safe, healthy and comfortable workplace. We will strive toward reducing risks, by sorting risks through risk assessment activities and countermeasures for and improvement of sorted risks, based on 3S activities in which all employees participate.

Employee diversity

In 2020, Zero employees took nursing care leave and 16 employees took parental leave.

Work-life balance

The second and fourth Fridays of even month are designated as “Happy Family Life Days,” and employees are encouraged not to work overtime on these days.

Human resources cultivation and training in the workplace

To enhance the knowledge and skills required of employees, we implement level-based training that is conducted according to years of experience and position. We have made a plan to provide the right training at the right time. In 2020, we were unable to hold training as in previous years due to measures to prevent the spread of COVID-19, but we took thorough infection prevention measures and conducted group training for 11 employees and a managerial training unique to the Mishima Plant for 9 employees, for a total of 20 employees.

The Environment

Environmental management

In line with our principle of “Deal fairly with society and value harmony with the environment”, we declared an environmental policy, adopting the environmental management system of ISO 14001. In order to reduce the environmental burden, we established reducing industrial waste and reducing greenhouse gas emissions as major tasks and actively strive to improve our production process and eliminate energy waste. As regards other measures, we established autonomous management targets to respond to legal regulations and operate within the autonomous management targets.
In our efforts to deal with noise, odor, vibration, and other sensory pollution, we have added one deodorizer as a measure against odor. We have received cooperation from 28 residents (as of December 2020) living in the four towns surrounding the plant as environmental monitors, and have visited them once a month to report on the situation at their homes and conduct interviews, leading to improvements. However, in order to prevent the spread of COVID-19, we refrained from visiting them in person. Instead, we refrained from visiting them directly. Instead, we distributed direct mail and CSR reports, and responded to inquiries by phone.
As part of our efforts to contribute to the regional environment, we have planted 29,616 trees (as of December 2020) in the YOKOHAMA Forever Forest Project, which is also a company-wide activity, as well as in a tree-planting event at Otsuchi Gakuen in Otsuchi Town, Iwate Prefecture, and in the "Forest of Hope" seawall in Kakegawa City. However, due to the measures taken to prevent the expansion of COVID-19, we have decided to cancel these activities in FY2020.

A small group of us conducted a tree-planting activity at the Tamazawa Interchange ramp on the Izu-Jukan Expressway under the jurisdiction of the Ministry of Land, Infrastructure, Transport and Tourism.

After tree-growing activities at the Tamazawa Interchange Ramp on the Izu Longitudinal Highway under the jurisdiction of the Ministry of Land, Infrastructure, Transport and Tourism

*The event was cancelled due to the prevention of COVID-19 expansion. (The following four photos were taken in fiscal 2019.)
Construction of a seawall in Otsuchi-cho, Iwate Prefecture

Otsuchi Gakuen Tree Planting Association

Kakegawa City's "Forest of Hope" seawall

Concerning the protection of biodiversity, we have conducted team surveys of the upper, middle and lower reaches of the Goten River (in our neighborhood). Those activities have involved measurements of water quality, ecological observations being undertaken.
We have observed a wide variety of living creatures live in the river, including dragonfly nymphs (e.g. Calopteryx atrata, Macromia amphigena), fish (e.g. Opsariichthys platypus and Nipponocypris temminckii) , reptiles such as Soft-shelled turtle and Chinese pond turtle and birds such as Kingfishers, which are rare in a factory surrounded by houses. On the other hand, there is a lot of garbage dumped in the river, and we have been cleaning the river after monitoring in order to contribute in some small way to keep the Goten River beautiful.

However, river vegetation was wiped out by river dredging at the end of 2016, and the diversity of the river disappeared.
Therefore, in May 2019, the Numazu Civil Engineering Office of Shizuoka Prefecture, Mishima City, and the Mishima Plant signed a River Friendship agreement, and in 2020, we conducted activities with government participation twice a year to regenerate vegetation and create a comfortable environment for aquatic life in the Goten River.
In addition, as a result of cleaning up the agricultural waterway in front of the main gate of the plant, fireflies began to inhabit the river in 2012, and a firefly viewing party was held every year in May.
Last year, we welcomed 281 visitors to the event. In the future, we intend to build on such biodiversity protection activities.

catfish (esp. the Amur catfish, Silurus auratus)

Soft-shelled turtle and Red-eared slider (at the outlet of the final factory drain)

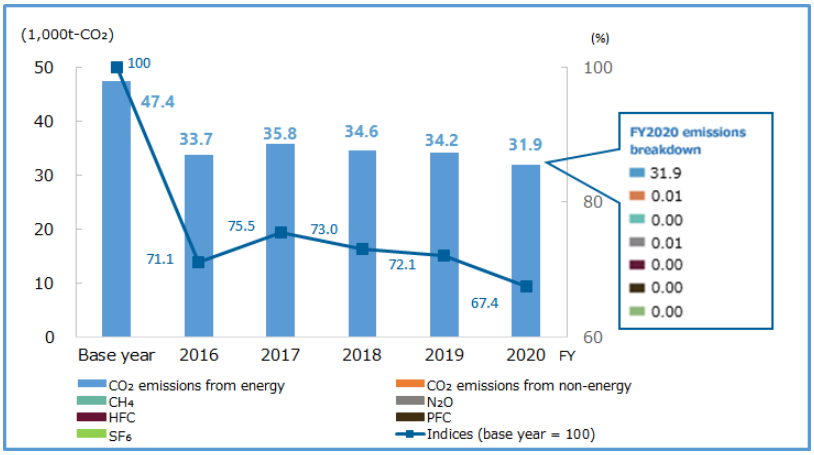
River Friendship 1st Collaborative Activity

River Friendship 2nd Collaborative Activity

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions

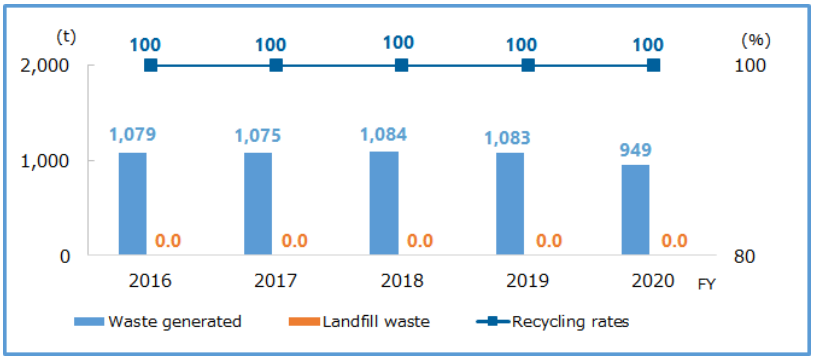


※The base year is deemed as 1990 except for HFC, PFC and SF_6, where the base year is 1995 as per the Kyoto Protocol.

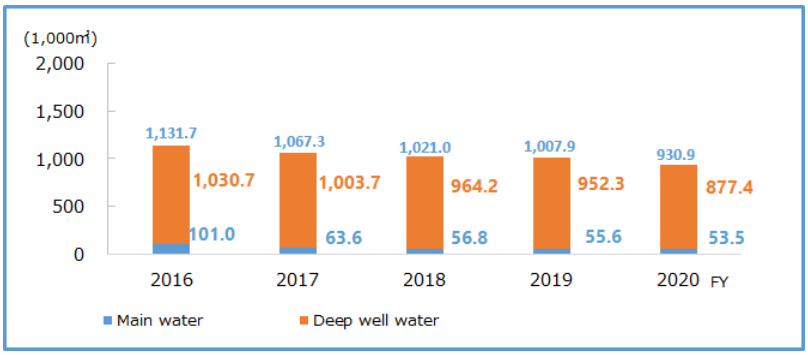
※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
Note that GHG emissions associated with purchased electric power in FY2009 were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Reduction of waste

Waste output



Water usage



The plant derives 90% of its total water usage from underground water. The remainder is from city waterworks.

Measures for discharge into water, air and soil

Data related to water contamination

The water used at the plant is discharged into the Goten River after being treated in the plant’s treatment facilities.

Item	Regulatory values	Voluntary standard values	FY2020 results		
			Average	Maximum	Minimum
pH	*5.8–8.6	6.2–8.2	7.5	7.9	7.4
BOD concentration (mg/l)	15	4 or less	1.5	2.6	0.5
COD concentration (mg/l)	★120	5 or less	2.2	2.4	1.4
SS concentration (mg/l)	20	8 or less	1.0	1.0	1.0
Oil concentration (mg/l)	2	1 or less	1.0	1.0	1.0

※Agreement on Environmental Protection with Mishima City; Star marks are according to the Water Pollution Prevention Law. (regulatory value of BOD is the max. concentration)

※Discharge point: Goten River

Air pollutants (NOx, SOx)

Substance	NOx	SOx
Amount of emission (t/year)	20	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 results		
				Average	Maximum	Minimum
Mishima Plant Cogeneration	NOx*1(ppm) Soot and dust (g/m^3N)	100 0.05	80 0.01	54 Less than 0.001	63 Less than 0.001	44 Less than 0.001
Mishima Plant Boiler	NOx*2(ppm) Soot and dust (g/m^3N)	130 0.1	65 0.02	28 0.001	32 0.001	23 0.001

※According to the Air Pollution Prevention Law and recommended values set by Mishima City.

※1 Data are expressed based on a 16% oxygen content conversion value.

※2 Data are expressed based on a 5% oxygen content conversion value.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Mishima Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Fair Operating Practices

Relationship with business partners

A CSR study seminar was held for the benefit of suppliers:

Date/Time: January 24, 2020: 1:00 p.m. to 3:00 p.m.

Location: Meeting Room 1&2, Mishima Plant

Seminar content:

- Yokohama Rubber's CSR activity policy
- Labor Management
- Workplace Safety
- Chemical Substance Management
- Waste Management
- Reporting on cases of non-compliance

Instructor for the content stated above: Manager Kojima of the Indirect Material Procurement Department

- Environmental contribution activities at the Mishima Plant

Instructor: Staff Member Miyazaki of the Equipment Procurement Section, Indirect Materials Procurement Department

Participants: 32 people from 32 business partners

Consumer Issues

Communication with customers

To customers who tour the plant, we introduce our acquisition of the Automotive Industry Quality Management System Standard ISO/TS 16949.
Furthermore, in response to inquiries received from customers to whom we have delivered products, we make reports to them based on our quick investigation of the relevant matters.

Community Involvement and Development

Responses to comments and complaints received

We have held plant visits for local residents and environmental monitors twice a year (spring and fall), and explained our environmental initiatives to them. In fiscal 2020, we distributed a CSR report to prevent the expansion of COVID-19. At the Mishima Plant, the Environmental Management Office, as the contact window for regional communication, exchanges views with regional monitors, and in FY2020, we asked for their views 294 times (including 31 dialogues), although we refrained from direct visits. Most of them were related to noise and odor.
Thanks to effective explanations of the Mishima Plant's environmental measures and a willingness to listen to local residents' views, in 2020 there were no complaints from local residents.

Resident Consultation Meetings with local residents
*The event has been cancelled to prevent the expansion of COVID-19
(Photos were from FY2019)

Sweet potato digging

Relationship with local societies

- We used to participate in the annual cleanup service work at Rakujyuen, a public park in Mishima City organized by the Mishima District Environmental Preservation Promotion Council, but it was cancelled in FY2020 to prevent the spread of COVID-19.
- In FY2020, the use of gymnasiums and bachelor dormitory grounds located within the business premises is also prohibited from March to prevent the spread of COVID-19. In 2020, 154 gymnasiums and 10 single dormitory grounds were rented out for use by the local residents.
- Clean-up activities are implemented in the vicinity of the plant once a week (the area involved extends from the plant's main gate to the vicinity of Mishima-Futsukamachi Station, and from the main gate to the vicinity of the employee parking lots).

- Blood donations cooperation is held twice a year at the plant, and employees as well as people related to partner companies donate blood; however, in fiscal 2020, we suspended this activity to prevent the spread of COVID-19.
- As a business that cooperates with the fire brigade, seven of our employees are registered with the Mishima City Fire Brigade as special function members. These employees were called out to assist the fire brigade one time in fiscal 2020.

Plant tours and workshops

In fiscal 2020, we accepted 10 factory tours with a total of 134 persons visiting the Mishima Plant. These results were up to the end of February. From March onward, we have stopped accepting non-essential plant tours due to prevent the spread of COVID-19 infection, and we have received no visitors.

Plant Tour Information

When: Plant tours are offered on days on which the plant is in operation (Mondays to Fridays).
Excludes year-end and New Year holidays and the consecutive holiday periods in May and August.
Hours: 8:00 a.m. to 4:00 p.m.
Contact: Mishima Plant, Operation Section Tel: +81-55-975-0800

Shinshiro Plant (TP)

Shinshiro Plant

Business activities
Production of tires for passenger cars

Total site area
223,879 m2

Number of employees
844 (as of December 2020)


Shinshiro Plant

Location
1 Furuyashiki, Noda-Aza, Shinshiro City, Aichi 441-1343, JAPAN

Contact for consultation and complaints
General Affairs Division Tel: +81-536-22-2251 Fax: +81-536-23-0353

Shinshiro-Minami Plant

Business activities
Production of tires for passenger cars

Total site area
110,998 m2


Shinshiro-Minami Plant

Number of employees
358 (as of December 2020)

Location
10-24 Oiri, Hitokuwada-Aza, Shinshiro City, Aichi 441-1338, JAPAN

Contact for consultation and complaints
General Affairs Division Tel: +81-536-22-2251 Fax: +81-536-23-0353

Message from the General Manager

Ken Hayami

The Shinshiro Plant is located in Shinshiro City, the gateway to the nature-rich Okumikawa region, and manufactures passenger car tires, primarily the low fuel-consumption tire, BluEarth, as the environmentally friendly products and Yokohama Rubber's flagship tire, ADVAN. In 1999, we obtained the ISO 14001 certification and strives to conduct plant operations, considering the environment, as a core plant of Yokohama Rubber, aiming to be “a top level contributor in terms of the environment. In addition, we have signed an environmental preservation agreement with Shinshiro City, and as a member of the community, we operate the plant in consideration of the living environment by testing the water quality of factory effluent and measuring noise. “Forever Forest Project” activities have completed the tree planting in and around the plant, and has now been extended to the community and other businesses. In fiscal 2020, a total of about 9,000 seedlings were provided at 66 events, bringing the total number of seedlings planted and provided to the local community to about 255,000 since the planting activities began in 2009.

The Plant uses a large amount of water resources in the region in the process of producing tires. The employees ask themselves “we have received a gift from nature but what can we do for the environment?” Therefore, we made our own biotopes within the plant premises and also in fallow fields located at Yotsuya-Senmaida. We also conducted a biodiversity survey at the water source of the Toyo River, a clean river, and at the drain outlet of the plant. In fiscal year 2020, we are planning to continue such biodiversity protection activities and we will continue to protect nature, water resources and lives there.

We also operate the plant as a member of the region by opening the Tireland park on the premises to the public to be used as a place of leisure, and we accept plant tours by students of elementary, junior high and senior high schools in neighboring areas and receive various opinions through informal discussions with local ward heads. We will continue to contribute to work to be a plant that is loved by people in the region.

Organizational Governance

Compliance education

We conduct compliance training whose target is managers, supervisors, and new employees newly becoming working adults in order to heighten awareness of statutory compliance issues. Furthermore, CSR study meetings are held with business partners, and at such events we work to strengthen trusting relationships by once again acknowledging social contribution activities and the issue of statutory compliance.

CSR study meetings

Human Rights

Promotion of employment of people with disabilities

As of the end of November 2020, we have 23 disabled employees (disabled employment ratio of 2.80%). In the future as well, we will make efforts to expand the hiring of disabled persons, and to enhance the workplace environment for them.

Special education classroom: Work experience
*FY2020 was cancelled.

Labor Practices

Safety and health measures

Based on the recognition that, the basis of corporate activity is assuring the safety and health of both our employees and those of cooperating companies, Occupational Safety and Health Management System (OSHMS) certification in accordance with Japan Industrial Safety & Health Association (JISHA) standards was obtained. This was done as a means by which to realize a safe, healthy and comfortable workplace. Nine years have now passed since this achievement, and certification has been continued after passing the forth renewal examination.
We have conducted the following activities, with a focus on four main pillars (education, extraction of defects, hazard prediction, and risk assessment) based on mutual communication between the management and workers.

- Shinshiro Plant Safety and Health Committee, Shinshiro-Minami Plant Safety and Health Committee (once a month)
- Cooperating Companies Environmental Safety Sub-Committee Meeting, Safety Patrols by Cooperating Companies and the Facilities Division, Labor and Management Council, Safety Personnel Conference (each meeting: once a month)
- Regular follow up safety meetings conducted by the top management at plants
- Strengthened management to prevent overwork
- Reviews of past accidents

Education and training for employees

Safety education for employees starts from safety and health education at the time of joining the company and we are deploying activities, mainly by person-to-person education for employees by managers and sensory training, risk assessment practical training and safety personnel certification development training.

Safety Sensory Training for New Employees

Responses in case of disaster

For responses in case of disasters, regular evacuation drills are conducted in accordance with the annual fire and disaster prevention plan. At the drill, we establish a self-firefighting organization headquarters to conduct drills so that comprehensive responses can be made through fire extinguishing drills and rescue drills. Furthermore, the Shinshiro Plant conducts earthquake disaster drills and Business Continuity Plan (BCP) drills.

- Earthquake disaster prevention drills
- Emergency rescue seminars …In FY2020, due to the need to prevent the spread of COVID-19, we have decided to suspend the program for the time being. We will continue to hold training sessions as soon as there is a prospect of resumption.

Disaster prevention drill at night in Shinjo Minami Plant

The Environment

Environmental Policy of Shinshiro Plant, Yokohama Rubber Co., Ltd.

The Shinshiro Plant, as the core plant of Yokohama Rubber Co., Ltd., will be a pioneer, aiming to become "a company having world-class strengths in technologies for protecting the environment, embodying consideration towards the environment".

1. **By manufacturing products with heart and technology, we contribute to happiness and affluence and continue to practice "prevention of environmental pollution and sensory discomfort" and "improving the protection of the environment" by pre-emptive management, in an aim for zero environmental risks.**
2. **All departments and related companies constituting Shinshiro Plant shall build up and maintain a mechanism in accordance with the environmental management system established by themselves and improve environmentally friendly management under the leadership of top management.**
3. **We will deepen communications with all stakeholders that comply with the related laws, regulations, agreements and contracts, etc., and strive for regional contribution and social contribution.**

4. **In order to protect limited regional resources such as energy, raw materials and water, we practice activities preventing waste and promote 3R (*) and contribute to realization of low carbon and recycling society.**
   ***Reduce, Reuse and Recycle**
5. **In order to realize this policy, we establish environmental objectives and targets, carry out the plan deliberately and securely promote them by visualization of the results. Also, the policy, objective and goal are subject to review on a quantitative basis, and revised as necessary.**
6. **We cherish natural lives in the Shinshiro region in the Toyo River water system with rich water and strive for protection of biodiversity.**
7. **In harmony and fusion with rich nature of Shinshiro-shi, "Yama-no minato" and through "Yokohama Forever Forest" activities, we aim at regional contributions and coexistence of humans and nature through planting activities and planting instruction and furnishing seedlings.**
8. **We will provide thorough education and enlightenment activities so that all workers at the Shinshiro Plant can understand the policy and act accordingly.**
9. **This Policy shall be published.**

January 1, 2021
Ken Hayami
Plant General Manager,
Yokohama Rubber Co., Ltd., Shinshiro Plant

Reductions in greenhouse gas emissions

1. Active introduction of environmentally friendly high-efficiency products

In accordance with our medium- and long-term energy conservation plan, we always use high-efficiency products (top-runner equipment) when updating existing fans, pumps, and electro-mechanical equipment as well as air-conditioning equipment.
In 2020, we upgraded one 1000kVA high-voltage transformer to an amorphous transformer. We also replaced about 160 Hf fluorescent lamps with LED base lights and 38 floodlight-type incandescent lamps with LED floodlights.
We are also continuing to consider switching fuels and installing power generators at the South Plant in order to drastically reduce CO_2 emissions.

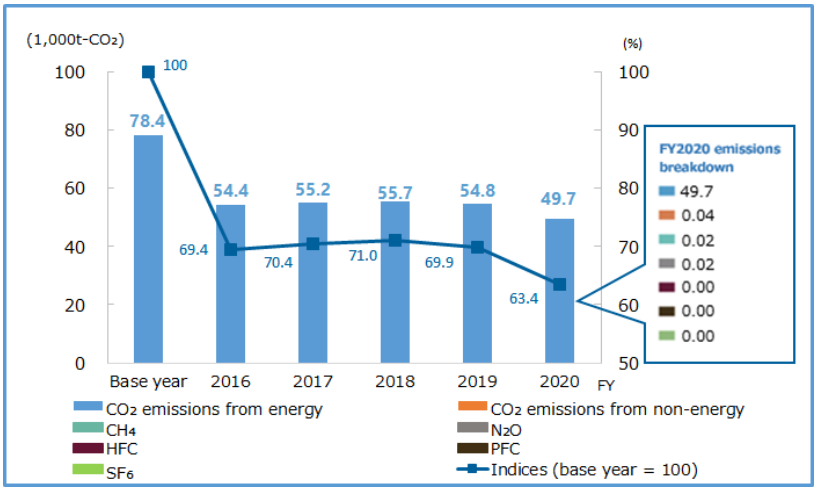
2. Advancement of energy-saving activities

In addition to improving efficiency on the supply side, we perform repairs leaks such as steam, water, plant air,etc. as well as enhancement of heat insulation. In FY2020, we converted six large cooling tower pumps to inverters.
In monthly meetings of the Energy Saving Subcommittee, where all process personnel gather, we strive to raise awareness by sharing problems and introducing individual initiatives.

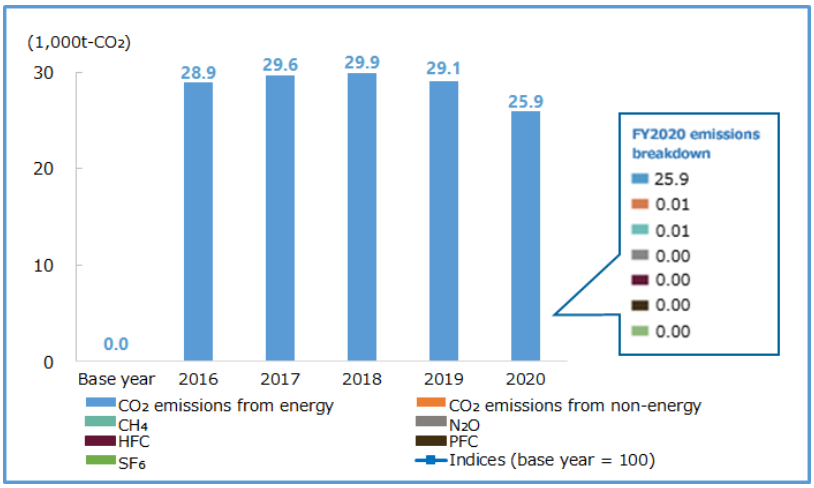
Environmental data and explanations

Reductions in greenhouse gas emissions

Shinshiro Plant



Shinshiro-Minami Plant



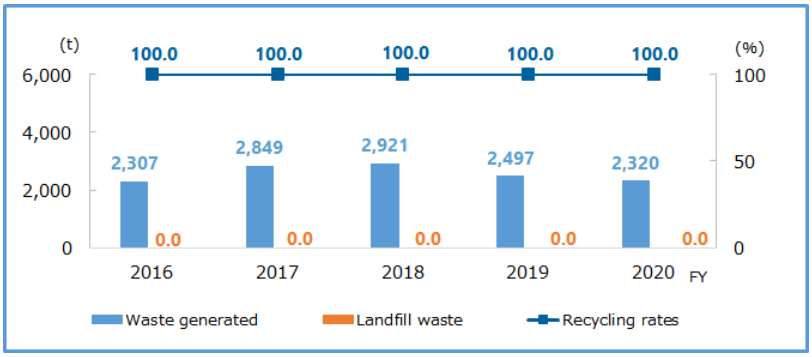
※The base year: In principal it is 1990. For HFC, PFC and SF_6, the base year is 1995 according to the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
Note that GHG emissions associated with purchased power were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment)

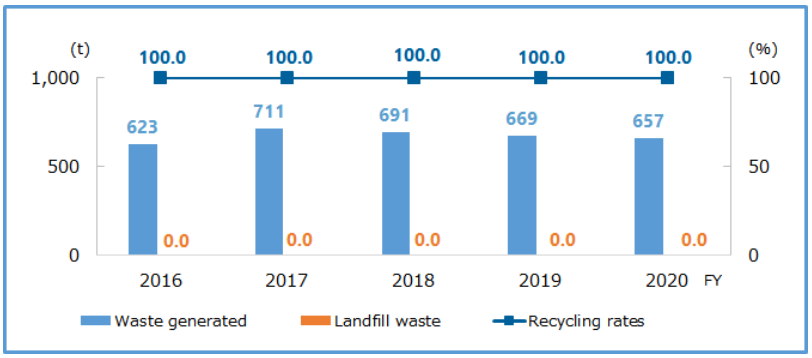
Effective use of resources / Waste reductions

Waste output

Shinshiro Plant

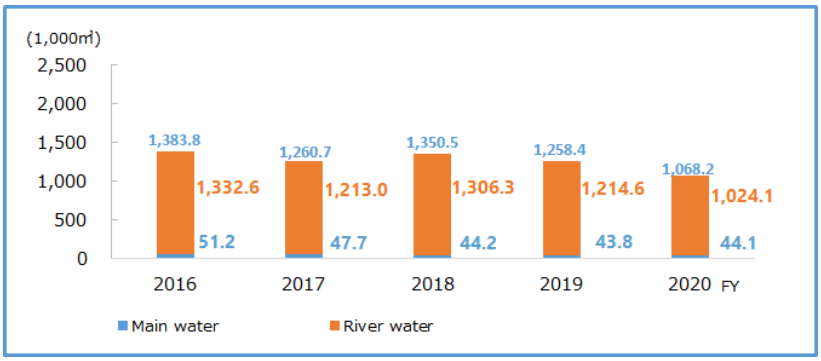


Shinshiro-Minami Plant



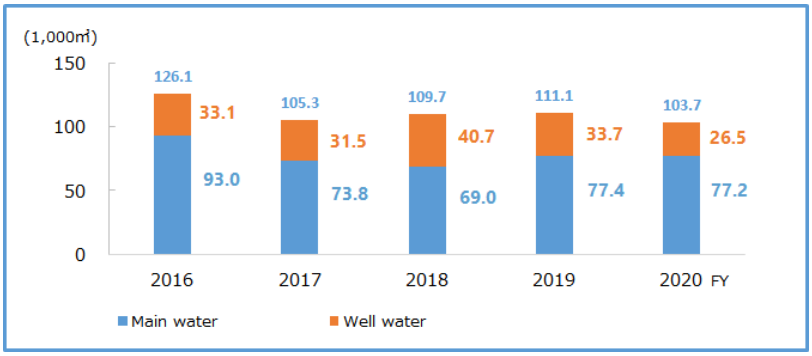
Water usage

Shinshiro Plant



Shinshiro Plant: uses main water and draws industrial water from the Toyo River and Noda River, a branch of the Toyo River.

Shinshiro-Minami Plant



Shinshiro-Minami Plant: uses main water and draws industrial water from well water.

Measures for discharge into water, air and soil

Data related to water contamination

Shinshiro Plant: twice a month, monitors twenty items of water contamination within self-regulated targets set under the ordinances of and agreements with Aichi Prefecture and Shinshiro City.

Drain	Item	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Drain 1	pH	5.8～8.6	6.5～8.0	7.38	7.6	7.1
	BOD concentration (mg/l)	20	9.0 or less	2.35	5.8	0.7
	COD concentration (mg/l)	20	11.0 or less	2.23	3.6	1
	SS concentration (mg/l)	20	6.0 or less	1.56	3.0	1.0
	Plant and animal oil concentration (mg/l)	10	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
Drain 2	pH	5.8～8.6	6.5～8.0	7.55	7.7	7.3
	BOD concentration (mg/l)	20	9.0 or less	1.87	6.2	0.50
	COD concentration (mg/l)	20	11.0 or less	1.79	2.9	1.0

Drain 2	SS concentration (mg/l)	20	6.0 or less	1.80	5.0	1.0
	Plant and animal oil concentration (mg/l)	10	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5

※In compliance with the Pollution Control Agreement, and Aichi Prefecture Ordinances.

※Shinshiro Plant Discharge point (Name of rivers) Noda River

Shinshiro-Minami Plant: once a month, monitors twenty items of water contamination within self-regulated targets set under the ordinances and agreements with Aichi Prefecture and Shinshiro City.

Drain	Item	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Drain 1	pH	5.8～8.6	6.5～8.0	7.45	7.6	7.3
	BOD concentration (mg/l)	20	9.0 or less	5.17	8.8	1.3
	COD concentration (mg/l)	20	11.0 or less	7.37	8.7	5.3
	SS concentration (mg/l)	20	6.0 or less	2.36	3.0	1.0
	Plant and animal oil concentration (mg/l)	10	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
Drain 2	pH	5.8～8.6	6.5～8.0	7.46	7.8	7.1
	BOD concentration (mg/l)	20	9.0 or less	5.21	8.9	2.6
	COD concentration (mg/l)	20	11.0 or less	4.93	7.1	3.3

Drain 2	SS concentration (mg/l)	20	6.0 or less	1.80	3.0	1.0
	Plant and animal oil concentration (mg/l)	10	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	Less than 0.5	Less than 0.5	Less than 0.5

※In accordance with the Pollution Control Agreement, and Aichi Prefecture Ordinances.

※Shinshiro-Minami Plant Discharge point (Name of rivers) Kuroda River

Air pollutants (NOx, Sox)

Substance	NOx emissions (t/year)	SOx emissions (t/year)
Shinshiro Plant	26	—
Shinshiro-Minami Plant	12	2

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Shinshiro Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Shinshiro Plant

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Boiler 1	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 130 0.1	0 100 0.030	Less than 0.029 78 0.0045	Less than 0.041 82 0.007	Less than 0.016 74 0.002
Boiler 2	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 130 0.1	0 100 0.030	Less than 0.037 77 0.002	Less than 0.051 89 0.002	Less than 0.023 65 0.002
Cogeneration	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 100 0.05	22.63 90 0.030	Less than 0.13 59 0.001	Less than 0.14 65 0.001	Less than 0.12 53 Less than 0.001
Warm-water Boiler A	Nox (ppm) Soot and dusts (g/m^3N)	150 0.1	120 0.030	40 Less than 0.001	40 Less than 0.001	40 Less than 0.001
Warm-water Boiler B	Nox (ppm) Soot and dusts (g/m^3N)	150 0.1	120 0.030	35 Less than 0.001	36 Less than 0.001	34 Less than 0.001
Dipping machine	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 250 0.15	Regulations in Article 3 150 0.1	Removed		

※ In compliance with the Air Pollution Control Law, Aichi Prefecture Ordinances and the Shinshiro City Pollution Control Agreement.

Shinshiro-Minami Plant

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
High-pressure Boiler 1	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 130 0.1	Regulations in Article 3 150 0.1	Removed		
High-pressure Boiler 2	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 130 0.1	Regulations in Article 3 150 0.1	Removed		
High-pressure Boiler 3	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.25	4.37 150 0.1	0.021 75 0.0055	0.027 77 0.007	0.015 73 0.004
High-pressure Boiler 4	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.25	4.30 150 0.1	0.02 66.5 0.006	0.029 67 0.007	0.013 66 0.005
High-pressure Boiler 5	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.25	4.33 150 0.1	0.023 66.5 0.0045	0.032 73 0.005	0.014 60 0.004
High-pressure Boiler 6	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.25	0.85 150 0.1	0.024 80.5 0.0045	0.032 82 0.005	0.016 79 0.004
Low-	SOx emissions (m^3N/h)	Regulations in Article 3 180	4.08 150 0.1			

pressure Boiler 1	Nox (ppm) Soot and dusts (g/m^3N)	0.25		Removed		
Low-pressure Boiler 2	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.25	4.07 150 0.1	Removed		
4t Boiler 1	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.3	2.24 150 0.1	0.0275 102 0.006	0.033 103 0.008	0.022 101 0.004
4t Boiler 2	SOx emissions (m^3N/h) Nox (ppm) Soot and dusts (g/m^3N)	Regulations in Article 3 180 0.3	2.12 150 0.1	0.032 111.5 0.005	0.04 115 0.007	0.024 108 0.003

※In compliance with the Air Pollution Control Law, the Shinshiro City Pollution Control Agreement and the Environmental Preservation Agreement with Shinshiro City.

Fair Operating Practices

CSR activities with business partners

As part of our CSR activities, we hold a CSR study meeting every year, but this year, because we are located in COVID-19 area, we distributed materials to each of our business partners via e-mail. The contents introduced to the 40 companies were as follows. "CSR activity policy, green procurement guidelines, workplace safety, information security, compliance violation cases, and introduction of sustainability initiatives with suppliers as information sharing from Toyota Motor Corporation.” We are promoting the sharing of legal compliance and crisis management with our suppliers.

Consumer Issues

Communication with customers

Through quality management that is based upon ISO/IATF 16949 certification which represents the automobile industry’s quality management system standard (QMS), we provide our customers with products whose quality can be trusted. Furthermore, we also introduce our quality measures through plant tours that are conducted for the benefit of Japanese and overseas automobile manufacturers, sales companies and general customers. Plant tours for overseas sales companies were cancelled to prevent the spread of COVID-19.

Responses to complaints

In response to inquiries received from customers with respect to products, we quickly investigate matters and issue reports. In the event that it is determined that issues have occurred during manufacturing, we initiate quick responses and work hard to prevent any reoccurrences.

Community Involvement and Development

Yokohama Forever Forest Project

A total of 15 employees participated in seven occasions to provide tree seedlings and guidance for tree planting in prefectural parks in Aichi and Shizuoka prefectures and commemorative tree planting at local elementary schools and children's preschools, working together with local people to create forests.
In 2020, we will provide 9,008 seedlings grown by ourselves for tree planting in each region. In addition, the Shinshiro Plant received the prestigious Japan Greenery Research and Development Center Chairman's Encouragement Award at the 40th Green City Awards sponsored by the Organization for Landscape and Urban Green Infrastructure.

Yokohama Forever Forest Project (FY2020)

Jan 6	140 seedlings donated to Seto City Kids Academy via the Donguri Mongori (NPO) for tree planting Aichi Earth Expo Memorial Park
Jan 24	160 seedlings donated to Yana Elementary School for tree planting In-school study forest (Wanpaku Mountain)
Feb 9	40 seedlings donated to Tominaga Shrine in Nakamachi, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting)

Feb 9	80 seedlings donated to Misono, Toei Town, Kitashitara District, Aichi Prefecture
Feb 12	Millennium Hope Hills, Iwanuma City, Miyagi Prefecture, “Fureai-no-mori” Tree Planting（NPO）Donguri Mongori
Feb 21	70 seedlings donated to Aichi Earth Expo Memorial Park（NPO）Donguri Mongori
Feb 21	100 seedlings donated to Mori no kindergarten and Taiyo kibdergarten via the Donguri Mongori (NPO) for tree planting Aichi Earth Expo Memorial Park
Feb 29	33 seedlings donated to Shizuoka Prefectural Forest Park
Mar 3	40 seedlings donated to Shinshiro City for Tozenji Temple Satoyama Project
Mar 3	3 seedlings donated to Mikawa Hana no Kai
Mar 5	201 seedlings donated to (NPO) Ozono Ume Mura Okoshi for Satoyama Tree Planting in Toei town
Mar 6	321 seedlings donated to Iwanuma City, Miyagi Prefecture via the Donguri Mongori for Millennium Hope Hills “Fureai-no-mori” Tree Planting
Mar 9	1 seedlings donated to Johoku Nursery School, Shinshiro City for Graduation Memorial Tree Planting
Mar 11	20 seedlings donated to Iwasaki Satoyama no Kai for Satoyama planting in Toyohashi City
Apr 1	50 seedlings donated to Tominaga Shrine in Nakamachi, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting）
Apr 3	210 seedlings donated to Seto City Kids Academy via the Donguri Mongori (NPO) for tree planting Aichi Earth Expo Memorial Park
Apr 3	100 seedlings donated to Nagoya Girl Scouts via the Donguri Mongori (NPO) for tree planting Aichi Earth Expo Memorial Park
Apr 3	80 seedlings donated to Kashimo, Nakatsugawa City, Gifu Prefecture, The mountain where the municipal aquifer for tree planting（NPO）Donguri Mongori
Apr 27	6 seedlings donated to Tominaga Shrine in Nagashino, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting）
Apr 27	66 seedlings donated to Nagashino, Shinshiro City, Nagashino Development Committee（Satoyama Park, Obe River for tree planting）

May 20	42 seedlings donated to local residents
May 21	48 seedlings donated to Nagoya Girl Scouts via the Donguri Mongori (NPO) for tree planting Aichi Earth Expo Memorial Park
Jun 3	120 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture（Furusato Festival）
Jun 9	43 seedlings donated to (NPO) Ozono Ume Mura Okoshi for Satoyama Tree Planting in Toei town
Jun 11	48 seedlings donated to Shizuoka Prefectural Forest Park
Jun 18	60 seedlings donated to Shizuoka Prefectural Forest Park
Jun 18	32 seedlings donated to Shizuoka Prefectural Forest Park
Jun 18	110 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Jun 20	8 seedlings donated to Mizono, toei town for Planting Trees to Create a Village with Dancing great purple emperor
Jun 23	480 seedlings donated to Yoshikawa, Shinshiro city, Aichi Prefecture
Jun 23	170 seedlings donated to Horaihi Elementary School（for poted seedling creation experience） （NPO）Donguri Mongori
Jun 24	117 seedlings donated to Shizuoka Prefectural Forest Park
Jun 24	152 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Jul 3	5 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Jul 22	26 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Jul 25	27 seedlings donated to Osaka Shrine, Kanazawa, Toyokawa City
Jul 27	340 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture

Jul 27	344 seedlings donated to Shizuoka Prefectural Forest Park
Aug 24	160 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Aug 27	106 seedlings donated to Shizuoka Prefectural Forest Park
Aug 27	24 seedlings donated to Shizuoka Prefectural Forest Park for planting
Sep 3	60 seedlings donated to Aichi Earth Expo Memorial Park（NPO）Donguri Mongori
Sep 3	149 seedlings donated to Kamigo Nursery School, Toyota City via (NPO) Donguri Mongori
Sep 14	352 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Sep 14	250 seedlings donated to Shizuoka Prefectural Forest Park
Oct 2	123 seedlings donated to Kamigo Nursery School, Toyota City via (NPO) Donguri Mongori
Oct 15	1 seedlings donated to (NPO) Ozono Ume Mura Okoshi for Ssymbol tree
Oct 21	100 seedlings donated to Aichi Earth Expo Memorial Park（NPO）Donguri Mongori
Oct 21	140 seedlings donated to Iwanuma City, Miyagi Prefecture via the Donguri Mongori for “Reiwa-no-mori” Tree Planting (NPO) Donguri Mongori
Oct 29	282 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Oct 29	236 seedlings donated to Shizuoka Prefectural Forest Park
Oct 30	15 seedlings donated to Shizuoka Prefectural Forest Park
Nov 3	45 seedlings donated to Tominaga Shrine in Nakamachi, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting）
Nov 5	35 seedlings donated to local residents

Nov 6	41 seedlings donated to Tominaga Shrine in Nakamachi, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting）
Nov 12	104 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Nov 15	117 seedlings donated to Shizuoka Prefectural Forest Park
Nov 17	80 seedlings donated to Tominaga Shrine in Nakamachi, Shinshiro City（Tominaga Shrine Guardian Forest Tree Planting）
Nov 24	100 seedlings donated to Shizuoka Prefectural Forest Park
Nov 28	32 seedlings donated to Shizuoka Prefectural Forest Park
Nov 28	100 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Nov 28	117 seedlings donated to Shizuoka Prefectural Forest Park
Dec 3	60 seedlings donated to Kashimo, Nakatsugawa City, Gifu Prefecture, The mountain where the municipal aquifer for tree planting（NPO）Donguri Mongori
Dec 3	80 seedlings donated to Aichi Earth Expo Memorial Park（NPO）Donguri Mongori
Dec 7	156 seedlings donated to Higashi-Mikawa Furusato Park, Aichi Prefecture
Dec 7	170 seedlings donated to Shizuoka Prefectural Forest Park

Collaboration with another company, Autobacs

In cooperation with Autobacs, we are providing seedlings free of charge so that people can become familiar with trees in the community.

Jan	120 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture
Mar	116 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture
May	407 seedlings donated to Autobacs Toyohashi, Toyokawa, nishio, Okazaki and Gamagori Store in Aichi Prefecture

Jun	47 seedlings donated to Autobacs Toyokawa Store in Aichi Prefecture
Sep	120 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture 124 seedlings donated to Autobacs Toyokawa Store in Aichi Prefecture
Oct	110 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture 110 seedlings donated to Autobacs Daijuuji Store in Aichi Prefecture
Nov	150 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture
Dec	103 seedlings donated to Autobacs Toyohashi Store in Aichi Prefecture 60 seedlings donated to Autobacs Toyokawa Store in Aichi Prefecture

In FY2020, we provided 9008 seedlings and participated in volunteer activities only 15 times in a short period of time in consideration of social distance due to the effects of COVID-19 self-restraint.

Presentation ceremony of the Japan Greenery Research and Development Center Chairman's Encouragement Award held by the Organization for Landscape and Urban Green Infrastructure.

Biodiversity protection activities

Our plants use large volumes of water in their tire production activities. Accordingly, we wondered; “Is it acceptable that we just receive nature’s bounty through such water resources? Isn’t there something we can do in return?” In light of these thoughts, in 2012 we began implementing biodiversity surveys. Although our activities in FY2020 were limited due to the effects of COVID-19, we will continue to support habitats by protecting and restoring water-related ecosystems. In addition, the Shinshiro Plant's biodiversity conservation activities were evaluated by Aichi Prefecture, and the Shinshiro Plant activities received the Good Practice Award from the Governor of Aichi Prefecture and the Mayor of Nagoya as an example of the most efficient method. We are also participating in the Shinshiro-Shitara Ecology Network Council promoted by Aichi Prefecture. In cooperation with local governments, universities, non-profit organizations (NPOs), other companies and partners, we hope to contribute to the biodiversity of the Shinshiro Shitara Region through the provision and planting of broad-leaved tree seedlings raised from local seeds from the Yokohama Rubber Shinshiro Plant.

Non-threatened (NT) Japanese fire belly newt>Yotsuya Senmaida

Activity site>Noda River

Activity site> Yotsuya Senmaida

Activity site> Kuroda River

Shinshiro Plant received the Good Practice Award for Biodiversity Conservation Activities.
*From left to right: Manager Natsume, Manager Ichizono, and Manager Sekimura.

Our plants use large volumes of water in their tire production activities. Accordingly, we wondered; “Is it acceptable that we just receive nature’s bounty through such water resources? Isn’t there something we can do in return?” In light of these thoughts, in 2012 we began implementing biodiversity surveys. These surveys were conducted on 21 occasions in 2018, and we also engaged in biotope creation and maintenance activities. In the future, we will continue to undertake activities aimed at safeguarding biodiversity, and will work to protect local water resources and aquatic life.

We are also participating in the Shinshiro-Shitara Ecology Network Council promoted by Aichi Prefecture. In cooperating with local government, universities, non-profit organizations (NPOs), other companies and partners, we hope to contribute to the biodiversity of the Shinshiro Shitara Region through the provision and planting of 600 broad-leaved tree seedlings raised from local seeds from the Yokohama Rubber Shinshiro Plant.

Relationship with local societies

The plant tour and round-table discussions for the mayors and environmental monitors in the area surrounding the plant have been cancelled for fiscal 2020 to prevent the spread of COVID-19. We will resume these events when we have a better chance of resuming them.

The ShinShiro Clean Festa has been cancelled by the government in 2020 to prevent the spread of COVID-19.

Over the two-day of March 14-15, the 2nd round of the All Japan Rally Championship, "Shinshiro Rally 2020" was scheduled to be held at the Prefectural Shinshiro General Park in Shinshiro for the 17th time. However, due to COVID-19, the event was held without an audience.
The Shinshiro Plant members prepared for the race by setting up banners and flags on the course.
In the JN1 class, Nukudahara won the race, and Arai and his son took 2nd and 3rd place. The Yokohama sponsored drivers fought hard, and the Yokohama Racing Team dominated the top positions.

Setting up banners and flags by plant staff

the 2nd round of the All Japan Rally Championship, "Shinshiro Rally 2020" over the two-day of March 14-15

Onomichi Plant (OP)

Business activities
Production of tires for large construction vehicles, mining vehicles and industrial vehicles.

Total site area
193,000m2

Number of employees
399 (as of December 2020)

Location
20 Higashi-Onomichi, Onomichi City, Hiroshima
722-0051, JAPAN

Contact for consultation and complaints
Plant Control Section
Tel: +81-848-46-4580
Fax: +81-848-46-4579

Message from the General Manager

Tadashi Miura

The Onomichi Plant is situated commanding a view of the Setouchi-Shimanami Kaido Expressway. It is a production plant that is dedicated exclusively to manufacturing tires for large construction vehicles, mining vehicles and industrial vehicles.

We conduct our activities with the aim of “becoming a company with world class technologies for protecting the environment,” as stated in Yokohama Rubber Environmental Policy, and based on “bright, happy and vigorous” activities and cherishing greetings and the “5S” activities. With regard to environmental matters, we have carried out the improvement of equipment, the reviewing of mechanisms, and repeated educational activities for the

purpose of preventing a recurrence of any past environmental trouble. Such has also been carried out in order to realize a reduction of environmental risk, a reduction of greenhouse gas emissions and a reduction of industrial waste.

At the same time, as part of our contributions to local communities and communication activities, we have continued to carry out such projects as opening to the public a “Dinosaur Park” on the premises of the plant, receiving plant visits from children, students and guests, participating in regional cultural activities and events, and advancing the Yokohama Forever Forest project. Furthermore, we commenced a biodiversity protection survey in 2013, and we have been continued our measures to maintain and improve biodiversity, both here on the plant premises and in the neighboring watercourses.

In the future as well, the Yokohama Rubber Onomichi Plant will be considerate of the global environment, and as we aim to be a business that is both loved by our region and contributes to society, we will strive to become a company that is trusted by the region.

Organizational Governance

We have formulated plant safety, environment and quality policies, and we make use of regular morning meetings etc. to ensure that employees have a thorough understanding of these policies. In our day-to-day operations, by carrying out our work according to carefully documented standard operating procedures, we are able to implement a management system that prevents improper working methods, and we also undertake ongoing improvement. Managerial staff undergo compliance-related training on a monthly basis, and we are working to enhance awareness of compliance-related issues among all employees.

Morning meeting

TPM instruction

Human Rights

Respect for human rights

In order to create a pleasant workplace where employees can work cheerfully, happily and energetically, we conduct workplace education, covering a variety of areas including information management, workplace bullying and harassment prevention, etc., every month. The content of this training involves the management of information and other issues such as workplace bullying, etc. We also maintain close collaboration with the Corporate Compliance Department regarding compliance-related reports and consultations, and if a problem occurs, we will promptly respond to it.

Labor Practices

Occupational safety and health measures

The plant has acquired Occupational Safety and Health Management System (OSHMS) certification and it continues certification activities. We took steps to revise the applicable work procedure manuals and to share such procedures horizontally with other sections. Moreover, by focused safety education activities, the revision of standard operating procedure (SOP) manuals through open work observations, individual education based on safe employee evaluation, the undertaking of one-on-one training between deputy work supervisors and workers, mutual advice, and daily “KYT” Hazard Prediction Training activities, we are working to heighten the consciousness of our employees with respect to safety.
We promote “safe employee” development as part of these activities, and award model employees with certification as “super safe employees”.
We have also begun implementing “safe employee” evaluation by process, to facilitate implementation of measures aimed at realizing improvements in relation to weaknesses at individual workplaces.

Onomichi Plant Safety and Health Policy

Basic Policy

Based on the recognition that the safety and health of all workers is the foundation of corporate activities, we will work to prevent occupational accidents and create healthy and comfortable workplaces.

Action Guidelines

1. **We will educate all factory workers on the importance of safety and health, and provide them with the necessary education and training to instill safety first and create a workforce capable of acting in a manner that ensures safety.**
2. **Reduce risks by prioritizing and systematically improving issues extracted from risk assessments and daily near-misses in terms of laws, regulations, safety, disaster prevention, and the workplace environment by breaking them down into personnel, equipment, and operations.**
3. **So that all employees working at the Onomichi Plant can execute "5S" activities (namely, seiri (organization activities), seiton (tidiness activities), seiso (cleaning activities), seiketsu (cleanliness activities) and shitsuke (discipline activities)) of their own volition, we construct a safety culture via the undertaking of a variety of different forms of education and various measures.**
4. **We will promote the creation of a comfortable work environment through the improvement of the work environment and mutual communication, and work to improve the mental and physical health of our employees.**
5. **As a business involved in the automotive industry, we proactively engage in activities that contribute to the prevention of traffic accidents thus aim to achieve the distinction of recording zero harmful accidents.**

Jan-2021
Tadashi Miura
General Manager, Onomichi Plant

Education and training for employees.

- We conduct open work observations every month in accordance with the Standard Operating Procedure and abnormal Operating Procedure to make improvements by sorting out work risks.
- Contests are held to invigorate and improve KYT (hazard prediction training). (Held six times a year).
- At the sensory training hall which enables for the experiencing of actual risk, all employees with less than three years of work experience undergo training once a year that is administered by the staff of the safety and health section.
- Concerning one-to-one education provided by managers to employees, for those with little work experience it is conducted once or more every three months, for veteran employees it is conducted once every six months.
- There is the opportunity to attend basic emergency first-aid seminars held by the fire department twice a year (30 to 50 persons annually choose to do so). The program has been postponed for FY2020 due to the response to COVID-19.
  * As of the end of December 2020, 68 people have obtained basic emergency first aid qualifications. (Persons expected to attend after the course resumes).

Responses in case of disaster

- We have organized a disaster-prevention, self-protection force comprised of plant members. This force conducts both map-based drills and evacuation drills for all plant employees (including tsunami scenarios). Each type of drill is conducted once a year.
- We also hold a night evacuation drill once a year for all shifts.
  Emergency contacts and emergency evacuation routes are posted at every process location of the plant, and they are thoroughly made known to all employees.

Promotion of employment of people with disabilities

Four disabled persons work at the plant. The tasks they undertake include both office work and light duties. We are continuing with activities for the purpose of newly-hiring disabled persons again in fiscal 2021.

Work-life balance

In aiming to improve the work-life balance of our employees, we manage overtime and promote the use of at least five paid holidays per year.

The Environment

Yokohama Rubber operates an environmental management system that is completely integrated throughout the entire company and makes efforts toward reducing risks by risk identification, countermeasures and improvements in areas exposed to environmental risks, through environmental risk management, implements its operations in compliance with relevant laws and ordinances, including the Pollution Control Agreement between the Onomichi Plant, Hiroshima Prefecture and Onomichi City, and looks to reduce risks by spreading awareness of nonconformities and small incidents at other Yokohama Rubber facilities. We are also implementing improvements to achieve ongoing enhancement of environmental performance, including a reduction of industrial waste and reduction of GHG emissions by promotion of energy savings. As a result of a plan to increase our internal audit staff according to corporate policy so as to further strengthen the ISO 14001 management system, we currently have 85 internal audit staff registered. We will further increase the number of staff according to our plan.
In addition, we have participated in the “Green Curtain Contest” held by Onomichi City as one of our environment activities.

Onomichi Plant Environmental Policy

In line with Yokohama Rubber's management policy "Deal fairly with society and value harmony with the environment," we strive to embody genuine consideration for the global environment, and to be a top-level business in terms of our contribution to the environment.

1. **The Onomichi Plant addresses measures in consideration of the environment in all of its activities under the leadership of top management, and it implements world-class environmental activities.**
2. **The Onomichi Plant continues its education and enlightenment programs so that each one of its employees understands this Policy and acts accordingly.**
3. **The Onomichi Plant has strengthened its Environmental Management System in order to become a plant trusted by local communities and it continues to advance management with a proactive stance in order to prevent environmental pollution and improve the environment, while aiming to reduce environmental risk to zero.**
4. **The Onomichi Plant complies with related laws, regulations and agreements, etc. It promotes harmony with local communities, and works to make both a regional and social contribution.**
5. **For the purpose of achieving both recycling and low-carbon societies, the Onomichi Plant promotes the prevention of global warming, the realization of energy savings and the recycling of resources.**
6. **The Onomichi Plant will continue to promote the creation of the Yokohama Forever Forest Project. It shall also build up a disaster prevention base while taking steps to create evergreen forests. Additionally, measures shall also be undertaken to protect the environment of the Seto Inland Sea and to conserve the biodiversity of the region.**
7. **In order to realize the Environmental Policy, the Onomichi Plant shall implement effective environmental management coordinated with its efforts to safeguard the local environment.**
8. **This Policy shall be published.**

1-January 2021
Tadashi Miura
General Manager, Onomichi Plant

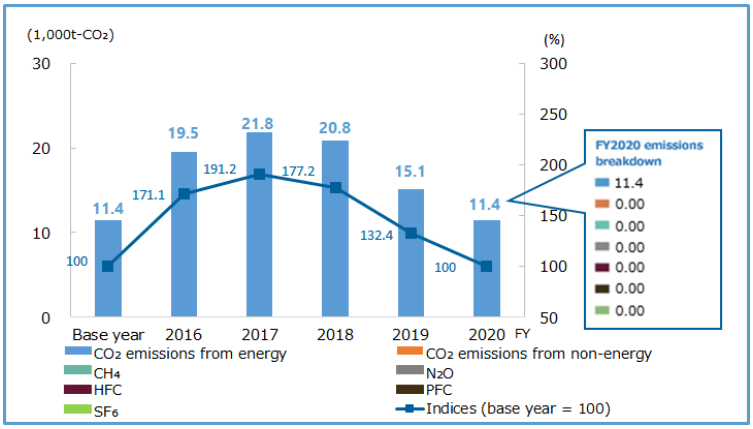
Environmental data

Reductions in greenhouse gas emissions

The plant's major energy sources are electricity and the city gas which is used as boiler fuel. Of the energy used in fiscal 2020, electricity accounted for 54.8%, city gas for 44.8% and other fuel sources 0.4%.

Greenhouse gas emissions

In order to reduce environmental loads, we have made efforts toward reducing GHG emissions by reduction targets for GHG emissions (total amount). In fiscal 2020, our energy-saving activities progressed as planned.



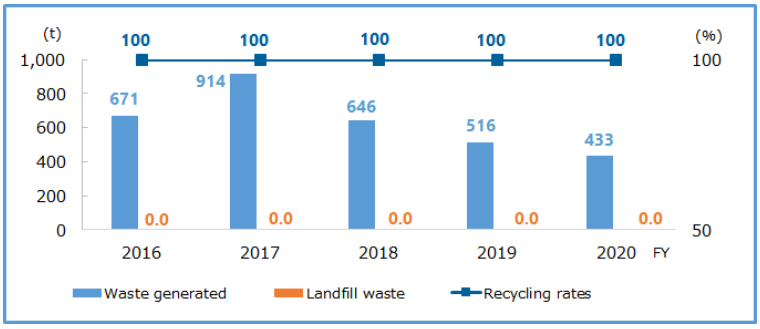
※The base year is defined as 1990 except for HFC, PFC and SF_6, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the "Calculation and Reporting Manual for Greenhouse Gas Emissions" issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
Note that GHG emissions associated with purchased power in FY2009 were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Reduction of waste

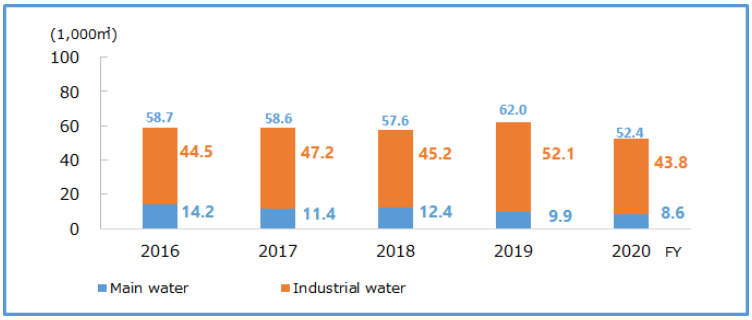
Waste output

The Onomichi Plant has maintained a recycling rate of 100%.



Water usage

The Onomichi Plant collects industrial water from the Numata River water system (river water) that flows in Hiroshima Prefecture.
Water is collected from the city waterworks of Onomichi City. We are working to reduce the amount of water use by circulating plant cooling water. Furthermore, we have implemented improvement measures by setting reduction targets.



Measures for discharge into water, air and soil

Data related to water contamination

Our plant mainly uses water from the Numata River water system in Hiroshima Prefecture.
We discharge rain water into a public body of water and life system water is discharged into the sewage system of Onomichi City. The water quality of discharges is managed by setting voluntary standard values.

Item	Regulatory values	Voluntary standard values	FY2020 result		
			Average	Maximum	Minimum
pH	More than 5–less than 9	5.4 or more–8.6 or less	7.5	7.6	7.3
BOD concentration (mg/l)	Less than 600	Less than 315	51.9	72	24
SS concentration (mg/l)	Less than 600	Less than 200	49.0	66	28
Plant and animal oil concentration (mg/l)	30 or less	Less than 24.0	6.8	15	4
Mineral oil concentration (mg/l)	5 or less	Less than 2.0	Less than 1.0	Less than 1.0	Less than 1.0

※Regulatory values are in compliance with the Onomichi City Sewage System Ordinance. Voluntary standard values were changed in September 2012.

Air pollutants (NOx, SOx, soot and dust)

Sooty smoke is measured twice a year by each individual boiler in order to monitor emissions and the density of pollutants. As a result of switching the fuel of boilers to city gas, emissions of Sulfur oxides into the air are now minimal. Thus, the Pollution Control Agreement was amended in March 2013. As a result of this development, the measurement of SOx is no longer necessary.

Item	NOx		SOx
Amount of emission (t/year)		1	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Onomichi Plant Boiler 1	NOx (ppm) Soot and dust (g/m^3N)	150 0.10	123 or less 0.011 or less	57.5 0.001	73 0.001	41 <0.001
Onomichi Plant Boiler 2	NOx (ppm) Soot and dust (g/m^3N)	150 0.10	120 or less 0.05 or less	80 0.001	91 0.001	73 <0.001

※In compliance with the Pollution Control Agreement with Hiroshima Prefecture and the Pollution Control Agreement with Onomichi City.

Soil contamination

In order to understand the status of contamination of soil by the specific hazardous substances, we autonomously measure the components of underground water once a year to monitor contamination.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Onomichi Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Biodiversity conservation activities

For the protection of biodiversity, the regional event in June 2002 was cancelled due to the response to COVID-19.
We undertook conservation activities along the Fujii River. This water course runs near the plant before flowing into the Seto Inland Sea. In addition to other conservation activities, we undertook the monitoring of insects and birds on the plant premises twice instead of four times a year on a self-restraint basis.

Fair Operating Practices

Communication with business partners

In collaboration with the Materials Procurement Department and Raw Materials Procurement Department, we collect opinions and requests from business partners and then respond to them sincerely. We also respond appropriately to questionnaires received from business partners.
The CSR Study Meeting, which was held until 2019, could not be held in 2020 due to the response to COVID-19.
Furthermore, we are constantly hosting plant tours both by manufacturers who purchase our products and sales agents. These tours give the visitors an opportunity to inspect the production frontlines and to confirm the quality of our products.

Consumer Issues

Responses to complaints

If any information related to defects arises from the market, we collect both usage information onsite as well as the actual tires in question. We then conduct analysis to investigate the causes. The results of such analysis are reported to the customer via the department in charge. In fiscal 2020, we prepared reports for 55 cases. No complaints were made. Although many defects arise from usage factors, whereby the cause is either a manufacturing factor or a design factor, we will quickly carry out countermeasures to prevent any reoccurrence.

Community Involvement and Development

Relationship with local societies

As a place of recreation for people in the region, we open the Dinosaur Park to the public every day, from 9:00 a.m. to 4:30 p.m. We have also installed a restroom exclusively for visitors (which can also handle visitors in wheelchairs). This allows visitors to the park to enjoy a more comfortable time.
In fiscal 2020, a total of 723 persons visited the Dinosaur Park.
We received one group for a plant tour.

The Dinosaur Park is open to the public

Participation in local activities

We participate and cooperate in local festivals every year.
The festival was cancelled in 2020 due to COVID-19.

Cooperation in Onomichi Truck Festival (September)

Truck Festival

Volunteer participation in preparing and clearing up after the Onomichi Lantern Festival (October)

Onomichi Lantern Festival

Blood donation activities by employees (April, September) (Donors: 46 persons)
Beautification activities around the plant (once a month) (120 participants)

41st Fujii River no Yube (June)

Fujii River no Yube – Evening event at Fujii riverside

Plant tour and workshop

We accept requests for plant tours from schools and companies from time to time.

Available days: Days when plant is in operation: from Monday to Friday
(Except for year end and New Year holidays, and consecutive holidays in May and August)
Hours: 9:00 a.m. to 3:00 p.m.
Contact: Onomichi Plant, Plant Control Section
Tel: +81-848-46-4580
A 30-minute walk from Higashi-Onomichi Station.

Ibaraki Plant (IP)

Business activities
Production of high-pressure hoses, sealing materials

Total site area
152,000m2

Number of employees
315 (as of the end of December 2020)

Location
1 Hatori-Nishi, Omitama City, Ibaraki 319-0198, JAPAN

Contact for consultation and complaints
Tadashi Kamimura, Plant Management Division
Tel: +81-299-46-1111
Fax: +81-299-46-0235
E-mail: tadashi.kamimura@y-yokohama.com

Message from the General Manager

Matsutaro Maeda

The Ibaraki Plant started its operations in 1973 as an exclusive plant of high pressure hoses, one of the largest in Japan, and in 1997 it started plant operations for building sealing materials and has continued production until today.

While working on measures in accordance with Yokohama Rubber's YX2023 Basic Policy so we become "a company having world-class strengths in technologies for protecting the environment", in that we also aim to achieve harmony, fusion and coexistence with the abundant and beautiful nature of Ibaraki, the plant is promoting numerous regional and social contribution activities in addition to its environmental policies. With respect to reducing industrial waste, we

have achieved results by strengthening team-improvement activities under the themes of reducing process nonconformities and improving materials and equipment management. As regards energy saving activities, all employees actively promote renewal of machinery and equipment by replacement with energy-saving models, increased energy saving awareness and paperless processes. The plant has been maintaining the highest AAA rank of the eco office registration system established by the prefecture.

Furthermore, the planting of trees at the plant, which began in 2008, was completed in 2012, we continue to grow seedlings. We donate these seedlings to both locally-held planting events.

In 2013, we have been conducting biodiversity surveys, which include bird and insect observation and vegetation surveys inside the plant, as well as water quality and aquatic organisms in the Sonobe River, which is located at the outlet of the plant's wastewater, three times a year to study the impact of wastewater on nature. Through such activities, we are promoting the company to the local communities and striving to improve our communication with local communities.

Additionally, our biodiversity activities have been recognized, in that in 2019 we were certified by ABINC as a Living Creature Coexistence Office®.

We further strengthen our environmental management systems at the Ibaraki Plant, and push forward with the total-employee participation model, both with regard to those activities that make an environmental contribution, and with regard to the prevention of environmental trouble.

Organizational Governance

Decision-making processes and structures

The following three items have been established with respect to the structuring of the plant’s safety culture:

1. Greet your guests properly
2. Keep your appearance neat and tidy
3. Be sure to point and call properly

With respect to the plant’s safety, environment and quality policies, such are established in accordance with corporate policy. Concerning their orientation, such is decided through the meetings system.

Human Rights

Consideration of human rights by suppliers

In February 2020, the 9th CSR study session was not held for COVID-19, and we sent study materials to our suppliers and collected questionnaires.
This time, the six items were as follows:

1. Yokohama Rubber's CSR Activity Policy
2. Green Procurement Guidelines
3. Workplace Safety
4. Information Security
5. Introduction of Compliance Violation Cases
6. Sustainability Initiatives with Our Suppliers

Complaint resolution

There were no reports submitted to the Corporate Compliance Department in 2020, and no consultations requested.

Labor Practices

Creating a safe and healthy workplace environment

Based on the recognition that the basis of corporate activity is assuring the safety and health of both our employees and those of cooperating companies, Occupational Safety and Health Management System (OSHMS) certification in accordance with Japan Industrial Safety & Health Association (JISHA) standards was obtained, and safety and health management has been implemented. This was done as a means by which to realize a safe, comfortable, and healthy workplace.
Safety management at each workplace is followed up at the Safety and Health Committee monthly.
This fiscal year, efforts have focused on improving the risk (pinching and entanglement) of power components such as lifting and lowering cylinders and rotating objects, particularly for achieving fundamental safety in plants.
Furthermore, we focused on education and training for basic operations (scalpel/knife, drum transportation, forklift, and crane operations) and competency assessment.
In addition, we have also focused on traffic safety education because the majority of employees commute to work by car, and we have worked to develop safe drivers and prevent accidents through means such as inviting external instructor to hold courses on traffic manners in an effort to improve driving manners.

Circle activities

Circle TPM improvement activities are being conducted to allow employees to make their own workplaces more comfortable and easier to work at. We are working to vitalize these activities through the holding of events including regular announcements on the results of improvements and bulletin board contests.

Human resources development and training

Work training is undertaken by our assignment of more senior workers to instruct both new hires and fixed-term employees. This one-on-one training increases individual skill levels because training results can be reviewed and revisited.

Promotion of employment of people with disabilities

As part of our promotion of the employment of disabled people, we currently have one disabled employees working actively in the plant.
We will continue to implement improvements to create a barrier-free workplace, so as to foster the employment of disabled people.

Work-life balance

Two days a week, Wednesdays and Fridays, have been established as days with specified hours for leaving work.

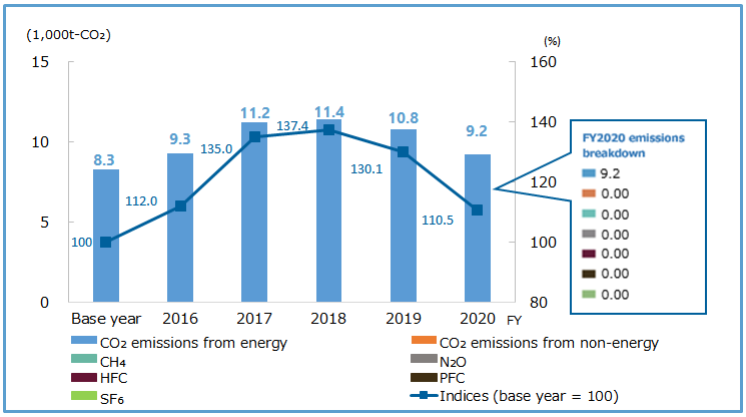
The Environment

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions

Greenhouse gas emissions have been gradually decreasing since fiscal 2010.



※The base year is defined as 1990 except for HFC, PFC and SF_6, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
Note that GHG emissions associated with purchased power in FY2009 were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

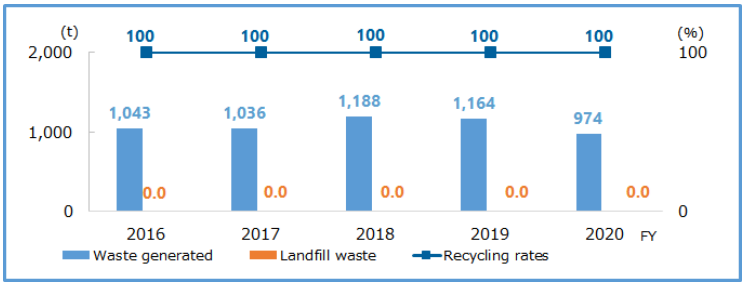
Effective use of resources / Reduction of waste

Waste generated

From fiscal 2006, we have continued complete zero emissions.

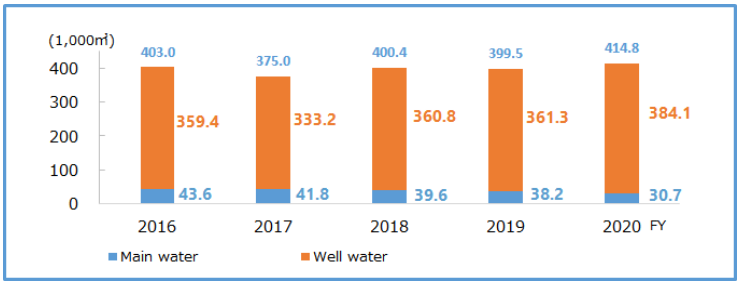
Waste landfill

In fiscal 2007, we achieved a recycling rate of 100% and we have maintained that rate since.



Water usage

The plant uses 400,000 tons of water a year.
Sources consist of underground water of about 90% and city waterworks of 10%.



Measures for discharge into water, air and soil

Data related to water contamination

The plant discharges about 430,000 tons of wastewater a year into the Sonobe River.

Item	Regulatory values	Voluntary standard values	FY2020 result		
			Average	Maximum	Minimum
pH	5.8～8.6	6.7～8.2	7.6	7.9	7.2
BOD concentration (mg/l)	10	6.5	1.7	5	1.0
COD concentration (mg/l)	10	5.5	1.6	4.4	1.0
SS concentration (mg/l)	15	5.0	1.0	1.2	1.0
Mineral oil concentration (mg/l)	3	0.8	0.5	0.5	0.5

※Ibaraki Prefectural Ordinance and Environmental Protection Agreement with Omitama City

※Discharge point: Sonobe River

Soil contamination

We conduct groundwater analysis (shallow well) once a year and confirmed that the standard values were within the laws and the ordinances of Omitama City.

Air pollutants (NOx, SOx)

Measurements are conducted twice a year, and we have confirmed that the results are within the standards set out in all laws and in Omitama City Ordinances.

Substance	NOx	SOx
Amount of emission (t/year)	2.0	0.2

Facility	Item	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Ibaraki Plant No.1 Boiler	SOx emissions (K-value) NOx (ppm) Soot and dusts (g/m^3N)	17.5 260 0.3	10 or less 125 0.1	0.29 74 0.0025	0.29 77 0.003	0.29 71 0.002
Ibaraki Plant No. 2 Boiler	SOx emissions (K-value) NOx (ppm) Soot and dusts (g/m^3N)	17.5 260 0.3	10 or less 125 0.1	0.35 66 0.0015	0.41 71 0.002	0.29 61 0.001
Ibaraki Plant No. 3 boiler	SOx emissions (K-value) NOx (ppm) Soot and dusts (g/m^3N)	17.5 260 0.3	10 or less 125 0.1	0.37 74 0.0015	0.48 75 0.002	0.26 72 0.001

※The Air Pollution Control Act and Environmental Protection Agreement with Omitama City.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Ibaraki Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Noise reduction

Noises are measured at 15 places on the border of the plant premises once a month. We can confirm that the results are within the standards set out in Omitama City Ordinances (below 55db).

Preventing pollution

So as to prevent risks to the environment, once a year we conduct drills and tests in response to predicted emergency scenarios (such scenarios include oil leaks occurring from heavy oil storage tanks and solvent cans being upset during transportation, etc.).

Steps to reduce industrial waste

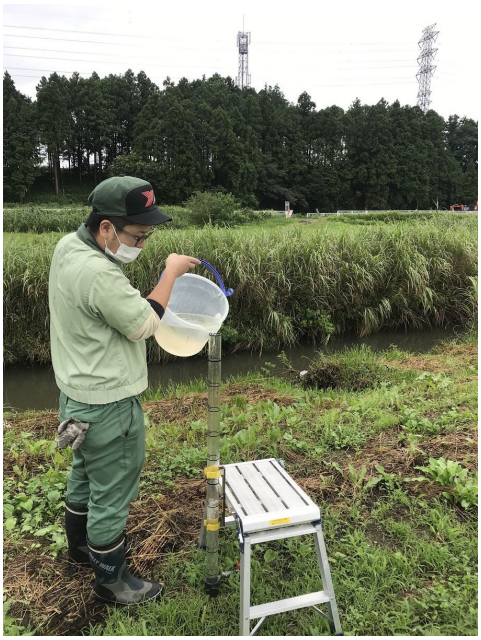
On the issue of reducing industrial waste, through our waste-reduction (MD) activities, we are revising the methods used to segregate waste within the plant and also promoting a paperless culture. Concerning auxiliary materials that are incidental to our products, we have obtained the EU ELV and RoHS Statement of Non-Inclusion Directives. Furthermore, goods that we purchase do not contain those substances that are subject to these provisions.

Alleviating and responding to climate change

As energy-saving activities, we have introduced LED lighting, and adopted the use of high-efficiency air conditioners and motors, along with promoting the application of heat-resistant and heat-retaining materials.
“Energy-saving Month” activities were implemented in February and August, with all employees participating in energy-saving promotion activities; a number of suggestions were put forward for reducing unnecessary energy wastage, and improvements were made.

Environmental protection, and recovery of natural habitats

Concerning the Sonobe River into which discharges from this plant flow, biodiversity protection surveys have been conducted at a frequency of two times a year. During these surveys, we have monitored water quality, aquatic life, plants and birdlife, etc. We have also taken steps to eliminate certain species of introduced plant and aquatic life.
In addition, starting in 2019, we have organized a new "Survey on the Living Environment of the Grey-faced buzzard (Butastur indicus) " to survey the vegetation and small animals (amphibians and reptiles) in the plant, focusing on the Grey-faced buzzard, which is as a Vulnerable, as one of the indicators for environmental conservation.
While taking measures to prevent the spread of COVID-19, we will continue to exterminate invasive species and conduct monitoring three times a year.



Water quality survey

Aquatic biological survey


Survey on the Growing Environment of the Sashibah

Fair Operating Practices

Thorough statutory compliance

The managers mainly responsible for placing orders with subcontractors have participated in seminars dealing with the improvement of subcontracting transactions. In addition, all personnel acting as subcontractor contact persons attended the subcontractor study sessions organized by the Indirect Materials Procurement Department that were held at the plant, reinforcing their understanding of legal requirements.

Consideration of supplier labor, safety and workplaces

Business dealings are conducted that are fair, transparent, openly competitive and suitable.

Thorough compliance

At the 9th CSR Study Meeting, the following information was shared.

1. Yokohama Rubber's CSR Activity Policy
2. Green Procurement Guidelines
3. Workplace Safety
4. Information Security
5. Introduction of Compliance Violation Cases
6. Sustainability Initiatives with Our Suppliers

As education within the company, we hold compliance seminars at a frequency of once a month.

Consumer Issues

Responses to complaints

If any complaints are raised about products, we quickly collect the actual item and investigate the causes and prepare reports to make a response satisfactory to the customer.

Community Involvement and Development

Coexistence and shared prosperity with the local community

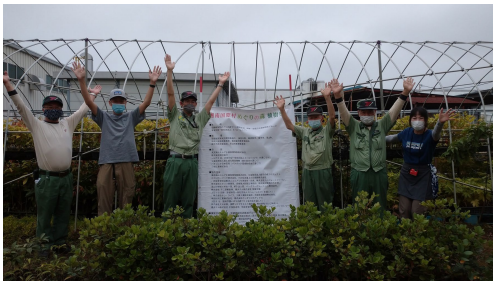
We had planned to hold a round-table discussion on biodiversity conservation activities, but due to the outbreak of COVID-19, we decided to postpone the meeting in the plant and distribute related materials.

Employment creation

In fiscal 2020, six new employees were recruited from local high schools. As part of our efforts to promote the employment of older people in the local community, the plant is currently employing four people introduced by the local Senior Human Resources Center.

Regional contributions

In FY2020, due to the outbreak of COVID-19, events such as the Fureai Plaza in Hatori district and the Fureai Festival in Omitama City, as well as the Otsuchi Gakuen "Hometown Department" tree-planting event, in which we are participating as volunteers, were cancelled.
A total of 687 seedlings were provided free of charge to Silva, a non-profit general incorporated association, in June and November.
The saplings were planted in the Shonan International Village Meguri-no-Mori project and Silva farmland.



Providing seedlings to Silva

Discussion for local residents regarding our activities to help safeguard biodiversity

We had planned to hold a round-table discussion on biodiversity conservation activities, but due to the outbreak of COVID-19, we had to distribute related materials.

Relationship with local societies

As part of our efforts to foster close communication with local government authorities and local corporations, we attend the regular meetings of the local corporation association to exchange views and share information with the Mayor, local councilors and the managers of other local corporations. (The annual meeting of the Omitama City Business Association was held on February 6, with 25 representatives of 13 companies attending)

Plant tours

We accepted internship programs for local high schools in February 2020.
While looking at the situation of COVID-19, we are being promoted to communicate with neighboring areas.

Nagano Plant (GP)

Business activities
Production of hydraulic-hose fitting and auto-hose fitting parts, and the production of self-sealing assemblies, coupling assemblies, hydraulic-hose assemblies, and auto-hose assemblies

Total site area
28,169 m2

Number of employees
340 (as of January 2021)

Location
9100 Kawano, Toyooka-mura, Shimoina-gun, Nagano
399-3201, JAPAN

Nagano Plant (Takamori)

Total site area
19,809 m2

Location
548 Yoshida, Takamori-cho, Shimoina-gun, Nagano
399-3102, JAPAN
*Production operations ceased in late June 2017.

Contact for consultation and complaints
Plant Control Section
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E-mail: y uji.kawamori @ y -yokohama .com

Message from the General Manager

Takahiro Ajima

The Nagano Plant began operations in the town of Takamori in 1961. In 2013, we began implementation of a plan to integrate the metal fittings processing and hose assembly operations of the Hoses and Couplings Division. The first stage in this project was the relocation of the functions of the Hiratsuka-Higashi plant (in Kanagawa Prefecture) to a new factory built in Toyooka Village; this relocation was completed in February 2014.
In 2015, work began on the construction of a new factory on an adjacent site; and this was completed in November 2016. We then proceeded to move the functions of the Takamori Plant to the new factory, the relocation of major production facilities was completed in June 2017, and this marked a major new step forward for us with the development of integrated production, including everything from metal fittings processing through to hose assembly.

Through machining and cutting processes that make use of equipment such as multi-axis CNC machines and NC lathes, etc., we produce oil pressure hose clasps and hose clasps for automobiles; we also complete the production of hoses produced at the Ibaraki Plant by caulking and assembling them. These products are then supplied to various hosepipe markets such as the construction machinery, machine tools and automobile manufacturing industries.
Besides being used for assembly in our own factory, the clasps that we manufacture are also supplied to affiliated plants in Japan and overseas and to other domestic customers nationwide. Furthermore, we don’t just engage in the cutting of clasps, we also undertake the assembly of self-seal couplings.

The Nagano factory is located on the east bank of the Tenryu River, in the Ina Valley with its beautiful natural scenery, bordered by the Southern Alps (Akaishi Range) and the Central Alps (Kiso Range). Precisely because of our location in such a marvelous natural environment, we are determined to keep the burden that we place on the environment as small as possible, and we are implementing various measures aimed at combatting global warming and at contributing to the development of a recycling-based, low-carbon society through energy conservation, resource-saving and recycling.

As regards energy-saving, in addition to promoting familiar energy-saving activities both at the plant and in the homes of all employees by acting as one, by introducing and renewing power saving-type equipment within the plant and seeking to control the wasteful use of energy, we are actively striving to help prevent global warming.

With regard to community and CSR activities, since fiscal 2013 we have been undertaking biodiversity conservation work involving surveys of the flora, aquatic fauna and birds along the Oshima and Tenryu Rivers. Such activities will help in conservation.

A plant tour by high school students

On September 7, 2015, thanks to assistance provided by Nagano Prefectural Government, we signed a "Forest Stewardship Agreement" with Toyooka Village and began to undertake satoyama (traditional community-managed forest) conservation work with respect to the area around the Toyooka Village Gymnasium and Sports Ground. In 2016, our efforts in these activities received recognition in the awarding of the Shimoina Forest Association Chairman's Prize in the Minami Shinshu Healthy Forests Awards.

Concerning the "Yokohama Forever Forest Project" that has continued since 2007, we concluded the plan for stage VI tree planting activities in 2013, and in 2016 we donated a total of 1,040 seedlings grown at the plant to local towns and villages.

For the Tenryu River which flows through the region, each year we proactively participate as a party in charge of allocations during the river cleanup (the environment picnic).

We also make effective use of opportunities for communication and exchange with the residents of Takamori and Toyooka, for example by arranging plant tours for local elementary and high school students and members of local organizations, etc. In addition to listening to what people have to say, we are working to improve understanding of the Company's business activities and its environmental conservation efforts.

Furthermore, by visiting the suppliers who collaborate with us on the provision of materials and parts for our business, and by proactively encouraging our customers to visit us, we foster smooth, two-way communication, in line with our aim of being a factory that is able to respond effectively to every nuance of market needs within the supply chain.

Organizational Governance

Concerning decision-making, a system is in place so that monthly meetings are held for each different area. Safety and health issues are decided by the Safety and Health Committee, environment issues by the Environment Committee, energy issues by the Energy Savings Committee, and quality issues by the Quality Committee. Furthermore, Section Chief Meetings and Follow-up Meetings are held as required to make decisions on plant-wide issues. Employees are notified of the decisions made by this committee system through daily communications and by the General Manager's Morning Meeting held at the start of each month.

As regards compliance awareness-raising activities, at the end of each monthly Safety and Health Committee meeting, the Safety and Health Section Chief (who also serves as head of the Corporate Compliance Department) uses the Department's "Workplace Learning Session Materials" to implement education for the meeting participants. In each workplace, the members of the Safety and Health Committee implement the activities decided on at the workplace safety and health committee meetings on a plant-wide basis.

Human Rights

Supply chain relations

Regarding our relationship with our parts and materials suppliers, we visit each supplier each year on a systematic basis to perform on-site verification of the production status and quality management situation, with the aim of putting our collaboration with partner companies on an even firmer footing.
We also aim to foster effective communication with suppliers through the holding of Purchasing Liaison Meetings, Supplier Quality Coordination Meetings, and CSR Study Meetings.
Regarding our customers, by attending certified plant management meetings and hosting plant inspections, we are able to assist customers with their business operations by maintaining a clear picture of the types of products and services that our customers, and the market as a whole, require.

Labor Practices

Nagano Plant Safety and Health Policy

Nagano Plant Safety and Health Policy

Basic Policy

Following the Management Policy "Create a workplace that values, improves and energizes people," Yokohama Rubber shall consider the safety and health to be the basis for everything, and focus on preventing occupational accidents and creating workplaces comfortable and healthy both physically and mentally.

Health and Safety Policy

1. **Giving top priority to the safety and health, participating by all members and developing globally, whole Yokohama Rubber group will improve the safety and health activities.**
2. **Yokohama Rubber will comply with all laws and regulations related to the safety and health, and take continuous improvement for the safety and health.**
3. **Yokohama Rubber will communicate with stake holders and cooperate with value chains to contribute to the local communities and the society.**
4. **Yokohama Rubber will strengthen the use of the Occupational Safety and Health Management System and repeat the PDCA cycle for continuous improvement.**
5. **Yokohama Rubber will carry out Risk Assessments for the "safety of the equipment" and "establishment of the Standard Operating Procedure" to promote reduction of the risk.**
6. **Being a part of the automotive industry, Yokohama Rubber will take preventive measures against traffic accidents.**
7. **Yokohama Rubber will create the safe and comfortable workplace, and take measures to promote physical and mental health positively.**
8. **Yokohama Rubber will make employees recognize the importance of the safety and the health, and provide education and training for them as required.**
9. **Yokohama Rubber shall publish this policy and make it known to all.**

January 1, 2021
Nagano Plant,Yokohama Rubber Co., Ltd.
General Manager
Takahiro Ajima

Disaster-prevention drills

Disaster drills were held on October 15 and 19, 2020 for water discharge from fire hydrants, November 3, 2020 for evacuation drills, November 27, 2020 for night evacuation drills, and October 14, 2020 for communication drills while taking COVID-19 measures.

Water drill

Evacuation drill

The Environment

Nagano Plant environmental policy

The environmental policy of the Nagano Plant, Yokohama Rubber Co., Ltd.

We will become a leading facility having technologies that protect the environment, embodying consideration toward the environment under the norm of "cherishing fairness in society and harmony with the environment" noted in the company's management policy.

1. **Under the leadership of senior management, the Nagano Plant, as an integrated clasp-processing and assembly operation, works on reducing environmental impacts at all stages on a global level, from production to waste recycling/handling, by implementing world-acclaimed environmental activities that are uniform through the Group.**
2. **In order to remain a plant that is trusted by society, we strive continuously to prevent environmental pollution and sensory pollution and to reduce environmental impact through chemical substance management in our effort to improve the environment. We achieve this by strengthening our environmental management systems and adopting a proactive stance in an aim for zero environmental risks.**
3. **We will address the realization of a recycling society and low-carbon society through promotion of means to help prevent global warming, save energy and resources, and recycle.**

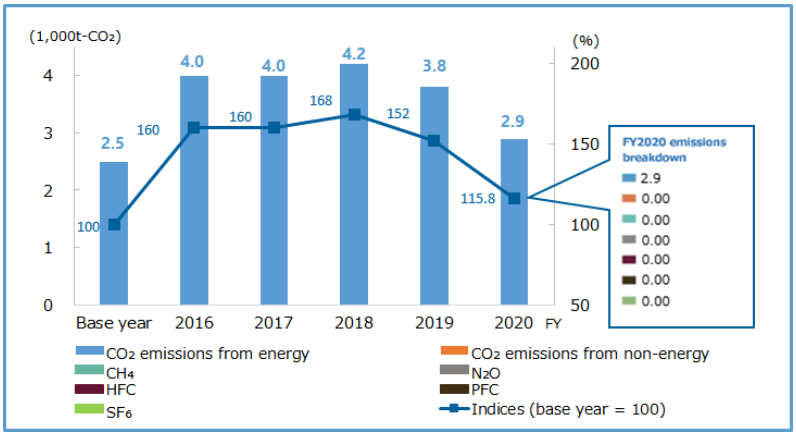
4. **We observe the environment-related laws and regulations applicable to the plant, and other agreements which we have entered into, and we continue to implement measures aimed at furthering environmental protection.**
5. **We work to promote cooperation with the value chain and to contribute to both the local community and society as a whole. While doing so, we shall respect international regulations and deepen our communication with stakeholders.**
6. **We have set out environmental objectives and targets to realize the environmental policy of the plant, and we prepare and implement plans accordingly.**
7. **We maintain communications with the local community, and promote activities in harmony with the region that also make a positive contribution to the region.**
8. **We will strive to conserve biological diversity irreplaceable in the region and use natural resources in a sustainable manner in our business activities.**
9. **To improve their own understanding, awareness, and actions, we educate and enlighten all our employees and individuals so that they fully understand this environmental policy.**
10. **Our environmental policy shall be made available to the public upon request.**

January 1, 2021
Nagano Plant,Yokohama Rubber Co., Ltd.
General Manager
Takahiro Ajima

Environmental data (Nagano Plant)

Reductions in greenhouse gas emissions

Greenhouse gas emissions at Nagano Plant and their indices (base year = 100)

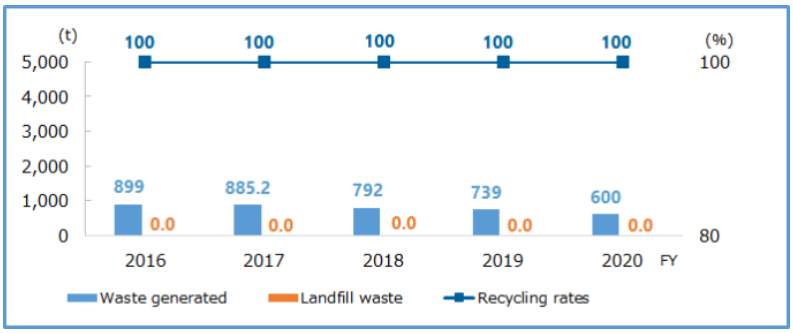


※Base year is defined as 1990 except for HFC, PFC and SF_6, where the base year is 1995 as per the Kyoto Protocol.

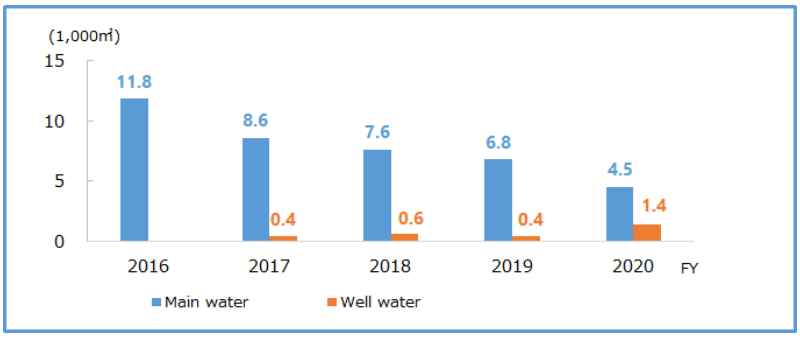
※Greenhouse gases (GHG) calculated in accordance with the Calculation and Reporting Manual for Greenhouse Gas Emissions (Ministry of the Environment, Ministry of the Economy, Trade and Industry).
Note that GHG emissions associated with purchased power in FY2009 were calculated using the table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Waste reductions

Waste output



Water usage



Measures for discharges into water, air and soil

Data related to water contamination

Plant Name Drain Name	Item	Regulatory values	Voluntary standard values	FY2020 result		
				Average	Maximum	Minimum
Nagano Plant (Takamori)	pH	5.8～8.6	6.0～8.0	6.5	6.5	6.5
	BOD concentration (mg/l)	160	22 or less	2.4	2.4	2.4
	COD concentration (mg/l)	160	25 or less	5.4	5.4	5.4
	SS concentration (mg/l)	200	—	0.5	0.5	0.5
	Plant and animal oil concentration (mg/l)	5	—	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	5	—	Less than 0.5	Less than 0.5	Less than 0.5
	pH	5.8～8.6	6.0～8.0	6.7	7.2	6.2
	BOD concentration (mg/l)	160	22 or less	1.7	2.2	1.4
Nagano Plant (Toyooka)	COD concentration (mg/l)	160	25 or less	2.0	3.4	0.6
	SS concentration (mg/l)	200	—	2.1	4.2	0.5
	Plant and animal oil concentration (mg/l)	5	—	Less than 0.5	Less than 0.5	Less than 0.5
	Mineral oil concentration (mg/l)	5	—	Less than 0.5	Less than 0.5	Less than 0.5

※Not subject to legal regulation (Voluntary standard measurement, twice or more per year)

※Regulatory values are in compliance with the ordinances of Nagano Prefecture

※Takamori : Water discharged to Oshima River, Toyooka : Water discharged to Terasawa River

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Nagano Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.
Regarding the handling of substances pursuant to the PRTR Law, please refer to

› the Safety Evaluation Table of Domestic Production Bases.

Participation in the Tenryu River Environment Picnic (Cleanup)

The Tenryu River Environmental Picnic (garbage pickup), which we participate in every year, was postponed due to COVID-19.

Yokohama Forever Forest Tree planting Activity

With the completion of the planting of 6,905 trees, exceeding the cumulative total number in the plan, the activities were concluded in stage VI of 2013.
Although the provision of seedlings outside the company was continued after that, the continued provision became difficult after the move to Toyooka, and the activities were concluded with the donation of 1,040 seedlings to local municipalities and residents in December 2016.

Biodiversity conservation activities

As part of biodiversity conservation activities that were started from fiscal 2013, we have conducted monitoring surveys in the spring and fall of every year downstream in the Oshima River where rainwater is discharged from Takamori and near its junction with the Tenryu River, as well as downstream in the Terasawa River where rainwater is discharged from Takamori and along the agricultural-water runoff ditch located at Kono Hydrophilic Park.
Although these activities had to be suspended with the transfer of the plant from Takamori to Toyooka in fiscal 2017, preparations are underway to resume activities in fiscal 2021.

Satoyama Conservation Activity

On September 7, 2015, thanks to assistance provided by Nagano Prefectural Government, we signed a “Forest Stewardship Agreement” with Toyooka Village and began to undertake satoyama (traditional community-managed forest) conservation work. From 2015 to 2016, three rounds of work were implemented; the work undertaken included undergrowth moving and improvement cutting.
Our efforts in these activities received recognition in the awarding of the Shimoina Forest Association Chairman’s Prize in the Minami Shinshu Healthy Forests Awards in 2017.
In FY2020, the event was postponed due to COVID-19.

MD Squad activities

Concerning the MD Squad’s activities within the plant, they have promoted paperless business practices, OA server 2S (sorting and setting), rag cloth recovery, stored documentation 2S, and a reduction in paper purchases by encouraging the use of the reverse side of previously used paper. In addition, we took measures against the heat by using green curtains, reducing telephone bills, centrally managing consumables, reviewing rental mop contracts, and energy-saving activities.

In particular, for energy conservation, we have introduced equipment that can quantify the amount of compressed air leakage and have been working to improve air leaks from facilities. And concerning the measures implemented to recover and reuse rag cloth, through activities such as weeks in which such measures have been strenuously promoted, the plant is now at the point of not needing to purchase additional stocks.


green curtain


Reinforcing Month for rag cloth recovery

Fair Operating Practices

Thorough statutory compliance

In fiscal year 2020, there were no legal violations or external complaints.

Consumer Issues

Internship

We offered internships for high school students in November 2020.

Community Involvement and Development

Donations to assist the local community

Due to COVID-19, the event was cancelled.
Donations were made to the Red Feather Community Chest.

Employee Communication

The annual labor-management sponsored events and family exchange events have all been cancelled for FY2020 due to COVID-19.

Blood donations

June 15: 44 participants
December 4: 35 participants

Safety Evaluation Table of Domestic Production Bases

Safety evaluation of substances subject to PRTR

How to approach the “Degree of Safety Evaluation”

While the PRTR Law requires reports of discharge amounts of chemical substances into the environment, the impact of chemical substances on the environment largely depends not only on the discharge amount but also on the degree of hazardousness. Therefore, it is necessary to take action based on comprehensive evaluation to reduce the risk that chemical substances pose to the environment, considering both the discharge amount and the hazardousness.
Accordingly, since 2010, with reference to the “Guidelines for Evaluation of Degree of Impact on Safety by Chemical Substances” issued by Kanagawa Prefecture, we have calculated the “translation discharge amount” obtained by multiplying the “discharge amount” of the individual substances to be reported under the PRTR Law by the “toxic coefficient” depending on the hazardousness published by Kanagawa Prefecture, and we have calculated the total discharge amount by adding them together. Then, we ranked the degree of impact on “human health” and on the “ecological system.” We clarified the direction of risk reduction by indicating the position of each business site with reference to “Evaluation Table of Degree of Impact on Safety.”
For example, the Hiratsuka Factory recorded a total translation discharge amount for human health of 5,382.93 tons and ranked II, while with a total translation discharge amount for the ecological system of 15.15 tons, it ranked 4.
Accordingly, the degree of impact on safety of the Hiratsuka Factory is indicated as “II-4.”

Reasons for changes in FY 2020

Onimichi Plant, Ⅷ-5 to Ⅶ-5 The effects on human health worsened.	The amounts discharged were increased for No. 392 n-hexane.
Shinshiro Plant, Ⅳ-4 to Ⅴ-4 The effects on human health improved.	The amounts handled and discharged were reduced for No. 333 hydrazine.

Mishima Plant, Ⅳ-4 to Ⅴ-4 The effects on human health improved.	As for No.333 hydrazine, which is no longer used, we are reducing the amount handled and discharged.
There were no changes in the ranks of Hiratsuka Factory, Shinshiro-Minami Plant, Mie Plant, Hamatite Plant, Ibaraki Plant, and Nagano Plant.	

Explanation about degree of impact on safety

Toxicity ranking and toxicity factor

Rank	A	B	C	D
Toxicity factor	1000	100	10	1

Ranking of effects on human health

Rank	Total converted emissions (Effects on human health)
I	10,000t or more
II	3,000t to less than 10,000t
III	1,000t to less than 3,000t
IV	300t to less than 1,000t
V	100t to less than 300t
VI	30t to less than 100t
VII	10t to less than 30t
VIII	Less than 10t

Ranking of effects on the ecosystem

Rank	Total converted emissions (Effects on the ecosystem)
1	10,000t or more
2	1,000t to less than 10,000t
3	100t to less than 1,000t
4	10t to less than 100t
5	Less than 10t

Changes in safety evaluation of each plant

Plant Name	2016	2017	2018	2019	2020	Improvement or worsened points
Hiratsuka Factory	Ⅱ-4	Ⅴ-4	Ⅱ-4	Ⅱ-4	Ⅱ-4	There was no change from the previous year (FY 2019).
Adhesives and Sealants Plant	Ⅵ-4	Ⅵ-5	Ⅶ-4	Ⅶ-5	Ⅶ-5	There was no change from the previous year (FY 2019).
Nagano Plant	Ⅶ-5	Ⅷ-5	Ⅷ-5	Ⅷ-5	Ⅷ-5	There was no change from the previous year (FY 2019).
Ibaraki Plant	Ⅶ-5	Ⅶ-5	Ⅶ-5	Ⅵ-5	Ⅵ-5	There was no change from the previous year (FY 2019).

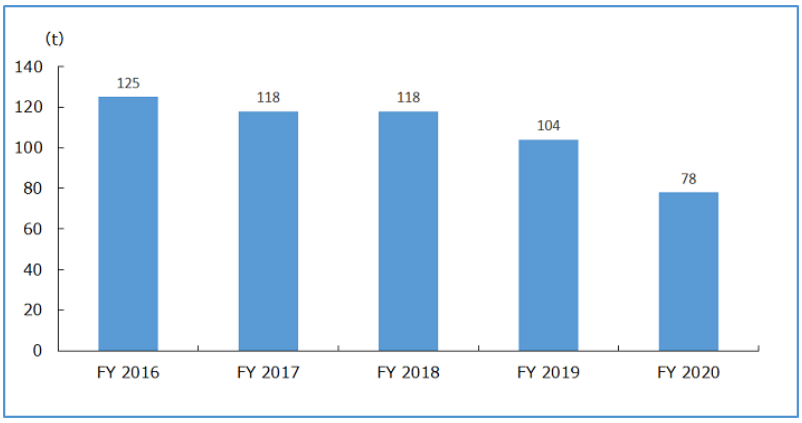
Shinshiro Plant	Ⅳ-4	Ⅳ-4	Ⅳ-4	Ⅳ-4	Ⅴ-4	The effects on human health better, and the effects on the ecosystem were no change as compared with the previous year (FY 2019).
Shinshiro-Minami Plant	Ⅴ-5	Ⅴ-5	Ⅴ-5	Ⅴ-5	Ⅴ-5	There was no change from the previous year (FY 2019).
Mie Plant	Ⅵ-4	Ⅵ-5	Ⅵ-5	Ⅵ-5	Ⅵ-5	There was no change from the previous year (FY 2019).
Mishima Plant	Ⅴ-4	Ⅳ-4	Ⅴ-4	Ⅳ-4	Ⅴ-4	The effects on human health better, and the effects on the ecosystem were no change as compared with the previous year (FY 2019).
Onomichi Plant	Ⅷ-5	Ⅶ-5	Ⅶ-5	Ⅷ-5	Ⅶ-5	The effects on human health worsened, and the effects on the ecosystem were no change as compared with the previous year (FY 2019).

Category	Effects on safety (effects on the ecosystem) 1 (Worse)	2	3	4	5 (Better)	
Effects on safety (effects on human health) I (Worse)						Great effect on human health
II				**Hiratsuka Factory** Hiratsuka Factory (FY 2019)		
III						Moderate effect on human health
IV				Shinshiro Plant (FY 2019) Mishima Plant (FY 2019)		
V				**Shinshiro Plant** **Mishima Plant**	**Shinshiro-Minami Plant** Shinshiro-Minami Plant (FY 2019)	
VI					**Mie Plant** **Ibaraki Plant** Mie Plant (FY 2019) Ibaraki Plant (FY 2019)	Small effect on human health
VII					**Adhesives and Sealants Plant** **Onomichi Plant** Adhesives and Sealants Plant (FY 2019)	
VIII (Better)					**Nagano Plant** Nagano Plant (FY 2019) Onomichi Plant (FY 2019)	
	Great effect on the ecosystem	**Moderate effect on the ecosystem**		**Small effect on the ecosystem**		

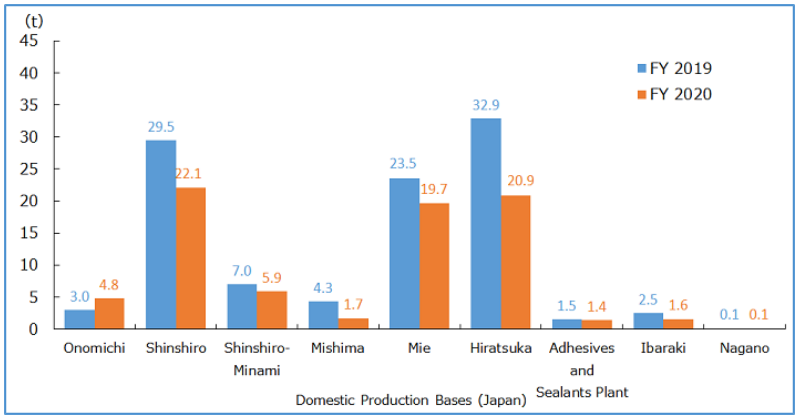
※As the Nagano Plants have no substances to be reported (less than 1 ton), their details are not attached.

※Each plant discloses information in accordance with the requirements of the law.

Discharge and total transfer amounts of PRTR in domestic factories



Discharge and total transfer amounts of PRTR in domestic factories (by location)



Onomichi Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅶ-5*1 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	153.8240	0.0000	2.1560	2.1560	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	77.3600	0.0000	1.0840	1.0840	B	0.000	A	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	8.0490	0.0000	0.1130	0.1130	D	0.000	B	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	1.5590	0.0000	0.0220	0.0220	D	0.000	B	0.000
	392	n-hexane	110-54-3	1.5490	1.3320	0.0000	1.3320	C	13.320	Not Reported	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	1.3880	0.0000	0.0190	0.0190	C	0.000	D	0.000
Not Subject to reporting	86	cresol	1319-77-3	0.9970	0.0000	0.0140	0.0140	B	0.000	C	0.000
	132	cobalt and its compounds		0.5850	0.0000	0.0080	0.0080	A	0.000	Not Reported	0.000
	333	hydrazine	302-01-2	0.1000	0.0000	0.1000	0.1000	A	0.000	B	0.000
		Total		245.4110	1.3320	3.5160	4.8480	—	13.320	—	0.000

*1: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Shinshiro Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅴ-4*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	702.2692	0.0000	14.8380	14.8380	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	207.3085	0.0000	3.9990	3.9990	B	0.000	A	0.000
	205	1,3-diphenylguanidine	102-06-7	119.8511	0.0000	0.0000	0.0000	A	0.000	C	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	35.5484	0.0000	0.3350	0.3350	C	0.000	D	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	32.7588	0.0000	0.1990	0.1990	D	0.000	B	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	20.1711	0.0000	0.2010	0.2010	D	0.000	B	0.000
	132	cobalt and its compounds		7.2530	0.0000	0.1280	0.1280	A	0.000	Not Reported	0.000
	86	cresol	1319-77-3	4.0610	0.0000	0.0650	0.0650	B	0.000	C	0.000
	392	n-hexane	110-54-3	1.1808	1.1808	0.0000	1.1808	C	11.808	Not Reported	0.000
Not Subject to reporting	411	formaldehyde	50-00-0	0.2982	0.0000	0.0050	0.0050	A	0.000	C	0.000
	154	cyclohexylamine	108-91-8	0.2919	0.2919	0.0000	0.2919	B	29.190	Not Reported	0.000
	80	xylene	1330-20-7	0.2580	0.2580	0.0000	0.2580	C	2.580	C	2.580
	333	hydrazine	302-01-2	0.2446	0.2446	0.0000	0.2446	A	244.600	B	24.460
	438	methylnaphthalene	1321-94-4	0.2140	0.0010	0.0000	0.0010	A	1.000	C	0.010
	405	boron compounds		0.1982	0.0000	0.0040	0.0040	D	0.000	Not Reported	0.000
	20	2-aminoethanol	141-43-5	0.0980	0.0980	0.0000	0.0980	C	0.980	C	0.980
	53	ethylbenzene	100-41-4	0.0830	0.0830	0.0000	0.0830	C	0.830	C	0.830
	296	1,2,4-trimethylbenzene	95-63-6	0.0808	0.0808	0.0000	0.0808	C	0.808	C	0.808
	297	1,3,5-trimethylbenzene	108-67-8	0.0678	0.0678	0.0000	0.0678	C	0.678	C	0.678
	462	tri-n-butyl phosphate	126-73-8	0.0225	0.0000	0.0000	0.0000	A	0.000	C	0.000
	368	4-tert-butylphenol	98-54-4	0.0128	0.0000	0.0000	0.0000	B	0.000	C	0.000
		Total		1,132.2717	2.3059	19.7740	22.0799	—	292.474	—	30.346

*1: Emissions volume = atmosphere + public bodies of water + soll
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Shinshiro-Minami Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: V-5*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	225.7446	0.0000	3.6440	3.6440	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	60.0070	0.0000	0.8730	0.8730	B	0.000	A	0.000
	205	1,3-diphenylguanidine	102-06-7	41.3116	0.0000	0.6780	0.6780	A	0.000	C	0.000
	438	methylnaphthalene	1321-94-4	35.3910	0.1770	0.0000	0.1770	A	177.000	C	1.770
	155	N-(cyclohexylthio)phthalimide	17796-82-6	11.1361	0.0000	0.1510	0.1510	D	0.000	B	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	6.3195	0.0000	0.0720	0.0720	D	0.000	A	0.000
	132	cobalt and its compounds		2.5860	0.0000	0.0500	0.0500	A	0.000	B	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	1.3818	0.0000	0.0620	0.0620	D	0.000	B	0.000
	86	cresol	1319-77-3	1.3077	0.0000	0.0250	0.0250	D	0.000	B	0.000
Not Subject to reporting	411	formaldehyde	50-00-0	0.0808	0.0000	0.0020	0.0020	A	0.000	C	0.000
	405	boron compounds		0.0708	0.0000	0.0010	0.0010	D	0.000	Not Reported	0.000
	392	n-hexane	110-54-3	0.0598	0.0598	0.0000	0.0598	C	0.598	Not Reported	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.0297	0.0297	0.0000	0.0297	C	0.297	C	0.297
	297	1,3,5-trimethylbenzene	108-67-8	0.0249	0.0249	0.0000	0.0249	C	0.249	C	0.249
	80	xylene	1330-20-7	0.0110	0.0110	0.0000	0.0110	C	0.110	C	0.110
		Total		385.4623	0.3024	5.5580	5.8604	—	178.254	—	2.426

*1: Emissions volume = atmosphere + public bodies of water + soll
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Mishima Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: V-4*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	357.3400	0.0000	0.2097	0.2097	D	0.000	B	0.000
	205	1,3-diphenylguanidine	102-06-7	85.5000	0.0000	0.0331	0.0331	A	0.000	C	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	72.1750	0.0000	0.0418	0.0418	B	0.000	A	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	13.3920	0.0000	0.0069	0.0069	D	0.000	B	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	10.0600	0.0000	0.0077	0.0077	D	0.000	B	0.000
	409	sodium poly(oxyethylene) dodecyl ether sulfate	9004-82-4	1.0330	0.0000	0.0046	0.0046	C	0.000	C	0.000
Not Subject to reporting	300	toluene	108-88-3	0.4370	0.4370	0.0000	0.4370	C	4.370	D	0.437
	53	ethylbenzene	100-41-4	0.2480	0.2480	0.0000	0.2480	C	2.480	C	2.480
	80	xylene	1330-20-7	0.1921	0.1718	0.0000	0.1718	C	1.718	C	1.718
	20	2-aminoethanol	141-43-5	0.1630	0.1630	0.0000	0.1630	B	16.300	C	1.630
	296	1,2,4-trimethylbenzene	95-63-6	0.1380	0.0979	0.0000	0.0979	C	0.979	C	0.979
	411	formaldehyde	50-00-0	0.1335	0.1335	0.0000	0.1335	A	133.500	C	1.335
	392	n-hexane	110-54-3	0.1108	0.1108	0.0000	0.1108	C	1.108	C	1.108
		Total		540.9224	1.3620	0.3037	1.6657	—	160.455	—	9.687

*1: Emissions volume = atmosphere + public bodies of water + soll
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Mie Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: VI-5*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	765.9300	0.0000	14.2001	14.2001	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	351.7150	0.0000	0.9137	0.9137	B	0.000	A	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	74.1200	0.0000	0.3844	0.3844	D	0.000	B	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	58.5600	0.0000	0.3126	0.3126	D	0.000	B	0.000
	132	cobalt and its compounds		18.5253	0.0000	0.0396	0.0396	A	0.000	Not Reported	0.000
	205	1,3-diphenylguanidine	102-06-7	7.6600	0.0000	0.0028	0.0028	A	0.000	C	0.000
	392	n-hexane	110-54-3	3.6325	2.6478	0.0000	2.6478	C	26.478	Not Reported	0.000
	300	toluene	108-88-3	3.3096	0.7845	0.0000	0.7845	C	7.845	D	0.784
	80	xylene	1330-20-7	1.4277	0.2662	0.0000	0.2662	C	2.662	C	2.662
Not Subject to reporting	405	boron compounds		0.9248	0.0000	0.0001	0.0001	D	0.000	Not Reported	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.9212	0.0011	0.0000	0.0011	C	0.011	C	0.011
	86	cresol	1319-77-3	0.8400	0.0000	0.0377	0.0377	B	0.000	C	0.000
	20	2-aminoethanol	141-43-5	0.5232	0.0000	0.0000	0.0000	B	0.000	C	0.000
	53	ethylbenzene	100-41-4	0.3898	0.1372	0.0000	0.1372	C	1.372	C	1.372
	453	molybdenum and its compounds		0.2016	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	297	1,3,5-trimethylbenzene	108-67-8	0.1978	0.0000	0.0000	0.0000	C	0.000	C	0.000
	400	benzene	71-43-2	0.1745	0.0003	0.0000	0.0003	A	0.251	C	0.003
	60	ethylenediaminetetraacetic acid	60-00-4	0.1512	0.0000	0.0000	0.0000	A	0.000	C	0.000
	411	formaldehyde	50-00-0	0.0968	0.0000	0.0000	0.0000	A	0.000	C	0.000
	10	acrolein	107-02-8	0.0792	0.0000	0.0000	0.0000	A	0.000	A	0.000
	83	cumene	98-82-8	0.0115	0.0000	0.0000	0.0000	B	0.000	C	0.000
	368	4-tert-butylphenol	98-54-4	0.0115	0.0000	0.0000	0.0000	B	0.000	C	0.000
	333	hydrazine	302-01-2	0.0108	0.0108	0.0000	0.0108	A	10.800	B	1.080
	412	manganese and its compounds		0.0090	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	264	2,3,5,6-tetrachloro-p-benzoquinone	118-75-2	0.0069	0.0000	0.0000	0.0000	A	0.000	C	0.000
	207	2,6-di-tert-butyl-4-cresol	128-37-0	0.0043	0.0000	0.0000	0.0000	A	0.000	B	0.000
	336	hydroquinone	123-31-9	0.0032	0.0000	0.0032	0.0032	A	0.000	B	0.000
	154	cyclohexylamine	108-91-8	0.0009	0.0000	0.0000	0.0000	B	0.000	Not Reported	0.000
	188	N,N-dicyclohexylamine	101-83-7	0.0009	0.0000	0.0000	0.0000	B	0.000	B	0.000
	349	phenol	108-95-2	0.00048	0.0000	0.0000	0.0000	A	0.000	C	0.000
	404	pentachlorophenol	87-86-5	0.0002	0.0000	0.0000	0.0000	A	0.000	A	0.000
	18	aniline	62-53-3	0.00010	0.0000	0.0000	0.0000	A	0.000	A	0.000
	88	chromium(VI) compounds		0.00003	0.0000	0.0000	0.0000	B	0.000	B	0.000
	395	water-soluble salts of peroxodisulfuric acid		0.00003	0.0000	0.0000	0.0000	Not Reported	0.000	Not Reported	0.000
	262	tetrachloroethylene	127-18-4	0.00002	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	125	chlorobenzene	108-90-7	0.00001	0.0000	0.0000	0.0000	B	0.000	B	0.000
		Total		1,289.4398	3.8478	15.8940	19.7418	—	49.418	—	5.912

*1: Emissions volume = atmosphere + public bodies of water + soil
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Hiratsuka Factory

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅱ-4*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	190.54768	0.00000	5.13408	5.13408	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	72.39236	0.00000	0.97143	0.97143	B	0.000	A	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	16.46400	0.00000	0.52778	0.52778	D	0.000	B	0.000
	58	ethylene glycol monomethyl ether	109-86-4	11.90570	5.28570	2.68840	7.97410	A	5,285.700	Not Reported	0.000
	31	antimony and its compounds		9.23580	0.00000	0.68299	0.68299	A	0.000	Not Reported	0.000
	205	1,3-diphenylguanidine	102-06-7	7.75406	0.00000	0.44077	0.44077	A	0.000	C	0.000
	460	tritolyl phosphate	1330-78-5	6.56600	0.00000	0.38292	0.38292	B	0.000	B	0.000
	352	diallyl phthalate	131－17-9	4.40963	0.00000	0.25631	0.25631	A	0.000	B	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	3.68469	0.00000	0.21358	0.21358	Not Reported	0.000	Not Reported	0.000
	300	toluene	108-88-3	3.60018	0.80561	0.26994	1.07555	B	80.561	C	8.056
	30	n-alkylbenzenesulfonic acid and its salts (alkyl C=10-14)		3.03345	0.00000	0.18190	0.18190	B	0.000	B	0.000
	80	xylene	1330-20-7	2.59740	0.50370	0.00526	0.50896	C	5.037	C	5.037
	452	2-mercaptobenzothiazole	149-30-4	2.10710	0.00000	0.12288	0.12288	B	0.000	B	0.000
	384	1-bromopropane	106-94-5	2.10375	0.00000	0.00000	0.00000	B	0.000	Not Reported	0.000
	259	tetraethylthiuram disulfide; disulfiram	97-77-8	1.79385	0.00000	0.10461	0.10461	A	0.000	B	0.000
	132	cobalt and its compounds		1.69288	0.00000	0.06187	0.06187	A	0.000	Not Reported	0.000
	268	tetramethylthiuram disulfide; thiram	137-26-8	1.67600	0.00000	0.09774	0.09774	A	0.000	A	0.000
	160	3,3'-dichloro-4,4'-diaminodiphenylmethane	101－14-4	1.34950	0.00000	0.07870	0.07870	A	0.000	B	0.000
	349	phenol	108-95-2	1.06619	0.00000	0.07017	0.07017	A	0.000	C	0.000
Not Subject to reporting	42	2-imidazolidinethione	96-45-7	0.97600	0.00000	0.05692	0.05692	B	0.000	Not Reported	0.000
	392	n-hexane	110-54-3	0.91336	0.83316	0.07940	0.91256	C	8.332	Not Reported	0.000
	305	lead compounds		0.85870	0.00000	0.05003	0.05003	A	0.000	Not Reported	0.000
	169	3-(3,4-dichlorophenyl)-1,1-dimethylurea; diuron; DCMU	330-54-1	0.64350	0.00000	0.12870	0.12870	B	0.000	A	0.000
	447	methylenebis(4,1-cyclohexylene) diisocyanate	5124-30-1	0.57071	0.00000	0.00171	0.00171	A	0.000	C	0.000
	359	n-butyl-2,3-epoxypropyl ether	2426-08-6	0.45525	0.00000	0.02655	0.02655	B	0.000	Not Reported	0.000
	203	diphenylamine	122-39-4	0.43590	0.00000	0.02542	0.02542	B	0.000	B	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	0.32300	0.00000	0.00000	0.00000	D	0.000	B	0.000
	127	chloroform	67-66-3	0.26793	0.00266	0.26329	0.26595	B	0.266	C	0.027
	330	bis(1-methyl-1-phenylethyl) peroxide	80-43-3	0.26720	0.00000	0.01558	0.01558	D	0.000	B	0.000
	88	chromium(VI) compounds		0.26030	0.00000	0.24805	0.24805	A	0.000	B	0.000
	1	zinc compounds (water-soluble)		0.25894	0.00000	0.01510	0.01510	D	0.000	Not Reported	0.000
	53	ethylbenzene	100-41-4	0.20977	0.20339	0.00109	0.20448	C	2.034	C	2.034
	86	cresol	1319-77-3	0.14057	0.00000	0.00820	0.00820	A	0.000	C	0.000
	411	formaldehyde	50-00-0	0.09692	0.00000	0.00711	0.00711	A	0.000	C	0.000
	410	poly(oxyethylene) nonylphenyl ether	9016-45-9	0.07362	0.00000	0.00394	0.00394	C	0.000	B	0.000
	446	4,4'-methylenedianiline	101－77-9	0.06730	0.00000	0.00000	0.00000	A	0.000	B	0.000
	405	boron compounds		0.05861	0.00145	0.01361	0.01506	D	0.001	Not Reported	0.000
	351	1,3-butadiene	106-99-0	0.04000	0.00100	0.03400	0.03500	A	1.000	Not Reported	0.000
	458	tris(2-ethylhexyl) phosphate	78-42-2	0.03669	0.00000	0.00000	0.00000	A	0.000	C	0.000
	13	acetonitrile	75-05-8	0.02545	0.00000	0.00000	0.00000	C	0.000	Not Reported	0.000
	240	styrene	100-42-5	0.01624	0.00000	0.00000	0.00000	B	0.000	C	0.000
	66	1,2-epoxybutane	106-88-7	0.01063	0.00000	0.00000	0.00000	C	0.000	Not Reported	0.000
	374	hydrogen fluoride and its water-soluble salts		0.01035	0.00000	0.00000	0.00000	D	0.000	Not Reported	0.000
		Total		350.99713	7.63667	13.26999	20.90666	—	5,382.931	—	15.154

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Adhesives and Sealants Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅶ-5*2			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	448	methylenebis(4,1-phenylene) diisocyanate	101-68-8	281.50700	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	298	tolylene diisocyanate	26471-62-5	106.06000	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	97	1-chloro-2-(chloromethyl)benzene	611-19-8	41.14000	0.00000	0.00000	0.00000	A	0.000	B	0.000
	51	2-ethylhexanoic acid	149-57-5	23.76000	0.00000	0.11880	0.11880	A	0.000	Not Reported	0.000
	160	3,3'-dichloro-4,4'-diaminodiphenylmethane	101－14-4	13.00000	0.00000	0.00000	0.00000	A	0.000	B	0.000
	125	chlorobenzene	108-90-7	8.21630	0.00000	0.00370	0.00370	B	0.000	B	0.000
	300	toluene	108-88-3	8.16200	0.10533	0.80615	0.91148	B	10.533	C	1.053
	80	xylene	1330-20-7	7.53630	0.01510	0.06029	0.07539	C	0.151	C	0.151
	302	naphthalene	91-20-3	7.13290	0.07180	0.00000	0.07180	B	7.180	B	7.180
	349	phenol	108-95-2	4.34370	0.00000	0.03470	0.03470	A	0.000	C	0.000
	239	organic tin compounds		3.64360	0.00000	0.10695	0.10695	A	0.000	Not Reported	0.000
	391	hexamethylene diisocyanate	822-06-0	3.56400	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	296	1,2,4-trimethylbenzene	95-63-6	2.83870	0.02839	0.00000	0.02839	C	0.284	C	0.284
Not Subject to reporting	297	1,3,5-trimethylbenzene	108-67-8	0.64360	0.00129	0.00000	0.00129	C	0.013	C	0.013
	401	1,2,4-benzenetricarboxylic 1,2-anhydride	552-30-7	0.50000	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	37	4,4'-isopropylidenediphenol; bisphenol A	80-05-7	0.47030	0.00000	0.00094	0.00094	B	0.000	C	0.000
	305	lead compounds		0.46000	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.13.7]decane; hexamethylenetetramine	100-97-0	0.29400	0.00000	0.00004	0.00004	Not Reported	0.000	Not Reported	0.000
	53	ethylbenzene	100-41-4	0.27990	0.00060	0.00224	0.00284	C	0.006	C	0.006
	34	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	0.19800	0.00000	0.00040	0.00040	A	0.000	Not Reported	0.000
	355	bis(2-ethylhexyl) phthalate	117-81－7	0.17600	0.00050	0.00090	0.00140	A	0.500	B	0.050
	133	2-ethoxyethyl acetate; ethylene glycol monoethyl ether acetate	111－15-9	0.15100	0.00000	0.00123	0.00123	B	0.000	Not Reported	0.000
	399	benzaldehyde	100-52-7	0.11700	0.00000	0.00000	0.00000	A	0.000	C	0.000
	309	nickel compounds		0.08000	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	405	boron compounds		0.06590	0.00000	0.00000	0.00000	D	0.000	Not Reported	0.000
	411	formaldehyde	50-00-0	0.04550	0.00000	0.00036	0.00036	A	0.000	C	0.000
	18	aniline	62-53-3	0.04100	0.00000	0.00000	0.00000	A	0.000	A	0.000
	268	tetramethylthiuram disulfide; thiram	137-26-8	0.04000	0.00000	0.00036	0.00036	A	0.000	A	0.000
	420	methyl methacrylate	80-62-6	0.03570	0.00000	0.00000	0.00000	C	0.000	Not Reported	0.000
	31	antimony and its compounds		0.02340	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	207	2,6-di-tert-butyl-4-cresol	128-37-0	0.02000	0.00000	0.00000	0.00000	A	0.000	B	0.000
	259	tetraethylthiuram disulfide; disulfiram	97-77-8	0.02000	0.00000	0.00000	0.00000	A	0.000	B	0.000
	69	2,3-epoxypropyl phenyl ether	122-60-1	0.01690	0.00000	0.00000	0.00000	A	0.000	Not Reported	0.000
	7	n-butyl acrylate	141-32-2	0.00900	0.00000	0.00000	0.00000	B	0.000	B	0.000
	86	cresol	1319-77-3	0.00520	0.00000	0.00001	0.00001	B	0.000	C	0.000
	368	4-tert-butylphenol	98-54-4	0.00420	0.00000	0.00000	0.00000	B	0.000	C	0.000
		Total		514.60110	0.22300	1.13708	1.36008	—	18.666	—	8.737

*1: Emissions volume = atmosphere + public bodies of water + soil
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Ibaraki Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅵ-5*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	298	tolylene diisocyanate	26471-62-5	32.2800	0.0000	1.2975	1.2975	A	0.000	B	0.000
	438	methylnaphthalene	1321-94-4	11.1076	0.0001	0.0000	0.0001	Not Reported	0.000	Not Reported	0.000
	239	organic tin compounds	—	2.1870	0.0000	0.0667	0.0667	A	0.000	Not Reported	0.000
Not Subject to reporting	300	toluene	108-88-3	0.3998	0.1840	0.0000	0.1840	B	18.400	C	1.840
	80	xylene	1330-20-7	0.0349	0.0000	0.0000	0.0000	C	0.000	B	0.000
	392	n-hexane	110-54-3	0.0371	0.0000	0.0000	0.0000	C	0.000	Not Reported	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.0235	0.0000	0.0000	0.0000	C	0.000	C	0.000
	354	di-n-butyl phthalate	84-74-2	0.0165	0.0165	0.0000	0.0165	A	16.530	B	1.653
	53	ethylbenzene	100-41-4	0.0075	0.0075	0.0000	0.0075	C	0.075	C	0.075
	400	benzene	71-43-2	0.0050	0.0050	0.0000	0.0050	A	4.960	C	0.050
	453	molybdenum and its compounds	—	0.0037	0.0037	0.0000	0.0037	C	0.037	C	0.037
		Total		46.1024	0.2167	1.3642	1.5809	—	40.001	—	3.654

*1: Emissions volume = atmosphere + public bodies of water + soll
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Nagano Plants

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: Ⅷ-5*2 Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Not subject to reporting	374	hydrogen fluoride and its water-soluble salts		0.0527	0.0527	0.0000	0.0527	D	0.053	Not Reported	0.000
	405	boron compounds		0.0322	0.0322	0.0000	0.0322	B	3.224	Not Reported	0.000
		Total		0.0849	0.0849	0.0000	0.0849	—	3.277	—	0.000

*1: Emissions volume = atmosphere + public bodies of water + soll
*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking