

ENVIRONMENTAL REPORT 2018

Scope of environmental management: Tokyo Head Office of Taisho Pharmaceutical, Kitanihon Branch, Kitanihon Branch Sapporo Office, Nakanihon Branch, Nakanihon Branch Kanazawa Office, Kansai Branch, Chushikoku Branch, Chushikoku Branch Shikoku Office, Kyushu Branch, Yokohama Office, Okinawa Office, three factories (Omiya, Hanyu, and Okayama), Research Center, five distribution centers (Hiroshima, Sendai, Yokohama, Osaka, Fukuoka), etc. and its group companies, Taisho Toyama Pharmaceutical Co., Ltd. (excluding the affiliated offices of its branch offices), MEJIRO KOSAN Co., Ltd., and Taisho Pharmaceutical Logistics Co., Ltd.

Policies for Environmental Activities

Taisho Pharmaceutical has promoted environmental activities and established initiatives on an annual basis based on the Fundamental Policy and Code of Conduct related to the Environment and on the Fourth Fundamental Environmental Plan (FY2016 to FY2020) that we established in July 2016.

Fundamental Policy and Code of Conduct Related to the Environment

Taisho Pharmaceutical positions environmental issues as one of the important issues for our business activities and sets and strives to achieve the numerical goals of resource saving and reduction of CO₂ emissions.

Fundamental Policy

The Company's mission is to contribute to society by creating and offering superior pharmaceuticals and health-related products as well as healthcare-related information and services in socially responsible ways that enrich people's lives by improving health and beauty. Based on this mission, we consider the environment and biodiversity in all corporate activities from product R&D, manufacturing and disposal to distribution and sales.

Code of Conduct

- ① We shall comply with environmental laws and regulations and our agreements with stakeholders including government institutions, related industry groups, and local residents. We shall also set voluntary management standards and work to improve our level of environmental management.
- ② We shall reduce our use of limited energy and resources to promote energy and resource conservation and help preserve the environment, and work to reduce CO₂ emissions.
- ③ We shall promote the three Rs of reduce, reuse and recycle to reduce waste and practice responsible waste treatment.
- ④ We shall work to create the conditions for effective environmental initiatives by providing environmental information to all employees to raise their awareness and broaden their perspective.
- ⑤ We shall participate in the environmental activities of related pharmaceutical manufacturing organizations, material recycling organizations and other organizations, and cooperate with them on environmental tasks.
- ⑥ We shall work to achieve harmony with local communities by energetically participating in the preservation and improvement of the local environment.
- ⑦ We shall proactively disclose information related to the environment and participate in various environmental events to promote communication outside the Company.
- ⑧ We shall prepare for environmental emergencies in ways such as preparing appropriate systems and manuals, and shall upgrade our crisis management system.

Sustainable Development Goals (SDGs) are 17 goals comprising 169 targets to be achieved by 2030 that were adopted by the 2015 UN Summit and seek resolution to problems confronting the world, such as poverty, the environment and social justice. Our CSR activities as a pharmaceutical company include actions within the scope of the SDGs around an axis of "Goal 3: Ensure healthy lives and promote well-being for all at all ages," based on our corporate philosophy to contribute to achieving the SDGs.



Impact of Corporate Activities on the Environment

We quantitatively evaluate the environmental influences of resource inputs, including various raw materials, water, and energy, from research and development to production, distribution, and sales.

About Environmental Loads

The basic concept of our environmental activities is to reduce "inputs" and "outputs." We are striving to increase the reduction rate by improving the facilities and operation methods for each material, water, and energy and effectively using disposed/emitted objects.

Our important initiatives are "reduction of CO₂ emissions" and "reduction of final landfill disposal volume of waste." Our environmental activities were also implemented with a focus on these two points.

✿ Important Initiatives

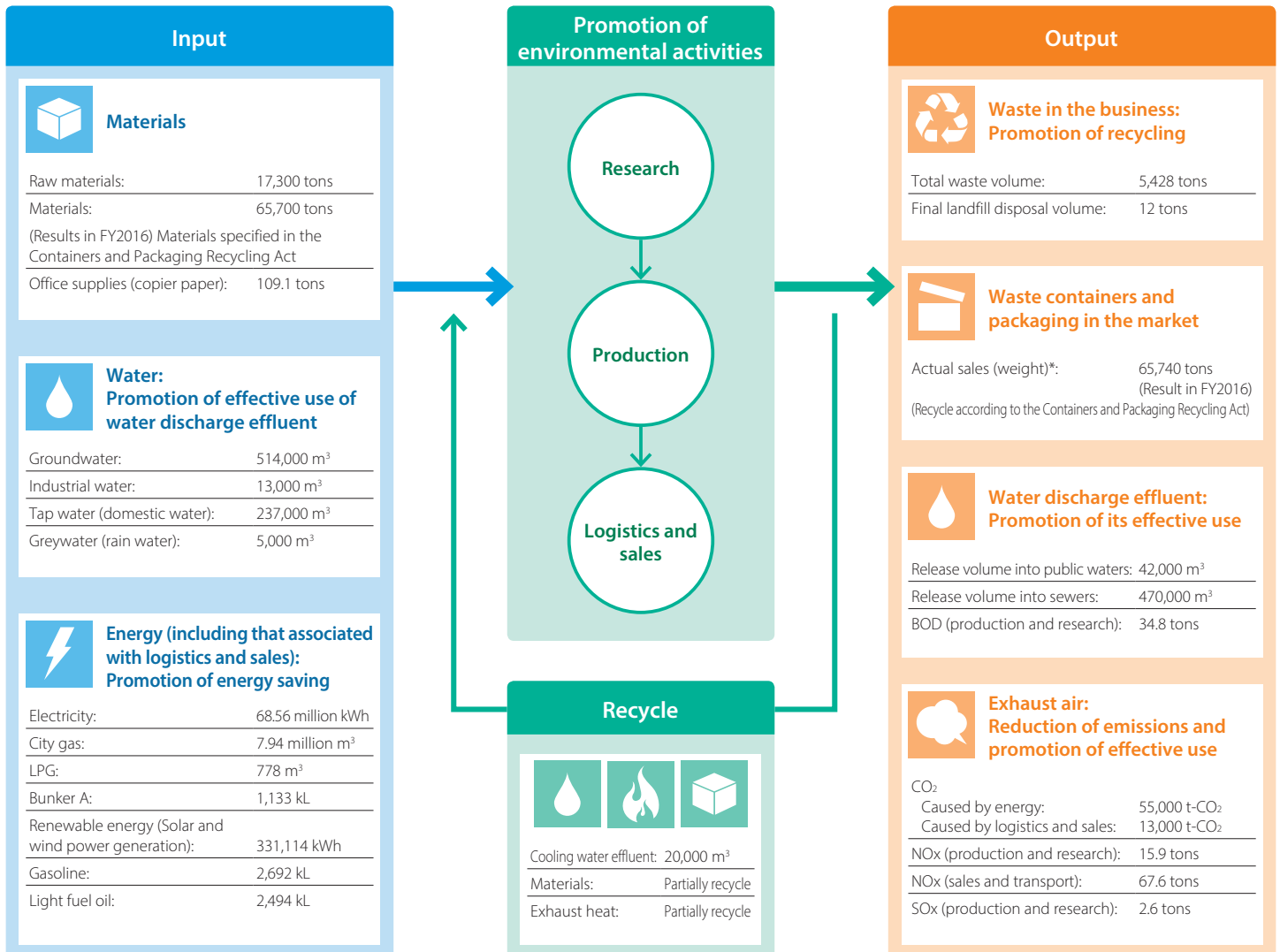
Reduction of CO₂ emissions (global warming countermeasures)

We positioned the reduction of CO₂ emissions as an important issue because it is a global issue for preventing global warming.

Reduction of final landfill disposal volume of waste

We positioned it as an important issue because the reduction of waste is a major issue in Japan where the final landfill disposal fields are almost full.

✿ Outline of Environmental Loads



* Only the containers and packaging covered by the Containers and Packaging Recycling Law

Targets and Results of Environmental Activities and Details of Future Actions

Targets and Results of Environmental Activities and Details of Future Actions

Initiative	Targets for the fiscal year ended March 31, 2018	Achievements of the fiscal year ended March 31, 2018	Self-assessment	Future initiatives
1. Rationalization of energy use	Reduce groupwide average annual energy consumption rate*1 by 1% or more	<ul style="list-style-type: none"> Annual average: worsened by 0.7% Omiya Factory (including Research Center): up 9.8% Hanyu Factory: down 6.3% Okayama Factory: up 1.1% Sales and back offices: up 1.3% 	×	<ul style="list-style-type: none"> Set the energy consumption rate for each department, factory Identified and analyzed factors behind changes
2. Reduction of CO ₂ emissions	Reduce the average amount of CO ₂ emissions from the offices in Saitama Prefecture (Omiya Factory, Research Center, and Hanyu Factory over the fiscal years ending March 2016 to 2020 by 13% compared with the baseline year*2) (Target CO ₂ emissions: 41,998 t-CO ₂)	<ul style="list-style-type: none"> 42,691 t-CO₂ (down 11.6%) 	△	
3. Promotion of environmentally friendly logistics operations	Reduce average annual energy consumption rate associated with transport by 1% or more against the baseline year by the fiscal year ended March 31, 2018	<ul style="list-style-type: none"> Up 0.3% year on year Fiscal year ended March 31, 2017: 0.0331 liter/ton-km Fiscal year ended March 31, 2018: 0.0332 liter/ton-km Annual average (over 5 years): down 0.8% 	△	<ul style="list-style-type: none"> Promote modal shift to sea transport from Omiya to Hiroshima Branch to increase efficiency to 30% Reduce energy consumption on transport in cooperation with freight companies and improve fuel efficiency Reduce the number of deliveries by increasing delivery volumes Omiya–Osaka, Hanyu Factory–Sendai
4. Appropriate management of waste handling	Appropriately manage waste handling operations through status checks of waste handling conducted by the Environment Management Division and waste management self-checks at each office based on the Industrial Waste Management and Waste Management Regulations	<ul style="list-style-type: none"> Status checks of waste handling: Conducted at 4 offices out of 15 Waste management self-checks: Conducted at all 15 offices in May Waste management seminars: Held at 4 offices 	○	<ul style="list-style-type: none"> Continue conducting status checks of waste handling and waste management self-checks Continue holding waste management seminars at offices Office-based inspection of waste disposal contractors
5. Compliance with the Act on Rational Use and Proper Management of Fluorocarbons	Manage fluorocarbons in accordance with the act	<ul style="list-style-type: none"> Conducted simple inspections and periodic inspections Calculated degree of leaks 	○	<ul style="list-style-type: none"> Conduct inspections Calculate degree of leaks
6. Promotion of environmental risk management	Eliminate environmental risks*3 that have an impact on the external environment	<ul style="list-style-type: none"> Incidents of environmental risk that had an impact on the external environment: 1 	×	<ul style="list-style-type: none"> Identify environmental risks and assess their impact Risk prevention measures
7. Promotion of environmental communication	Raise employees' awareness of the environment through Companywide Environmental Month events and group training events, including environmental seminars held at each branch	<ul style="list-style-type: none"> Conducted surveys to confirm the effectiveness of training events —Achieved the target at the branches that held training events Failed to achieve a total of 1,500 participants in the Environmental Month events July 2017 (summer): 1,256 participants February 2018 (winter): 1,102 participants 	△	<ul style="list-style-type: none"> Hold seminars on environmental education Environmental Month initiatives —Environmental risk —Lights-Down Campaign Incorporate activities in daily life, such as saving electricity and reducing resource consumption
	Publicly disclose information on environmental activities in a proper, fair and timely manner	<ul style="list-style-type: none"> Published the Social and Environmental Report (online edition) in October Participated in the Saitama City Environment Forum in October 	○	<ul style="list-style-type: none"> Publish the Social and Environmental Report (online edition) Participate in environmental activities held by external organizations

Self-assessment

○ = Made progress with adequate results

△ = Made progress with some degree of results

× = More effort required although some progress was made

*1 Groupwide average annual energy consumption rate

Omiya Factory (including Research Center): Energy consumption / (number of production lots × floor area)

Okayama Factory and Hanyu Factory: Energy consumption / (production × floor area)

Sales and back offices: Energy consumption / floor area

*2 Annual average of CO₂ emissions between the fiscal years ended March 31, 2003 and 2005 (Total emissions of the Omiya Factory, Research Center and Hanyu Factory: 48,275 tons)

*3 Events that have a certain magnitude, calculated by multiplying the impact of accidents or emergencies whose occurrence would have a significant environmental impact by the probability of such occurrence

Global Warming Prevention



CO₂ and fluorocarbons are the main causes of global warming. The reduction of these emissions is therefore a global issue. The Taisho Pharmaceutical Group is engaged in reducing the emission of CO₂ and fluorocarbons by appropriately managing equipment using fluorocarbons, and has set the goals outlined below.

Reduction of CO₂ Emissions

Goal

Reduce the average amount of CO₂ emissions from the offices in Saitama Prefecture over FY2015 to FY2019 by 13% compared with the baseline year

Taisho Pharmaceutical is engaged in the reduction of greenhouse gas emissions at all of its offices. Production departments operate with environmental management systems based on ISO 14001, and each department proposes its own reduction policies and strives to reduce CO₂ emissions.

Changes in Annual CO₂ Emissions

Fiscal year	2013	2014	2015	2016	2017
Factories (t-CO ₂)	35,212	34,299	34,493	35,902	34,685
Research Center (t-CO ₂)	14,958	14,589	14,132	14,350	15,346
Administrative offices (t-CO ₂)	4,905	5,000	5,071	5,504	4,949
Sales origin units (groupwide) (t-CO ₂ /million yen)	0.212	0.206	0.207	0.222	0.222

As initiatives to reduce CO₂ emissions, we are installing highly efficient equipment and engaging in energy-saving activities. We are also continuing to implement ongoing activities such as Cool Biz and participation in the Lights-Down Campaign held by the Ministry of the Environment.

Factories and the Research Center account for approximately 90% of CO₂ emissions groupwide, and efforts were made from both hard and soft aspects including the launch of an organization for across-the-board initiatives at all offices in FY2017. In FY2017, we introduced high-efficiency devices, including freezers, as a hardware initiative.

From the soft aspect, production departments conducted a review of operational methods of such items as air conditioning and utility equipment, using appropriate methods to operate equipment (reducing loss, etc.) and cutting the amount of standby power used.

Saitama Prefecture Ordinance to Promote Measures Against Global Warming

Fiscal year	Baseline year (2002–2004)	2015	2016	2017
Emissions (t-CO ₂)	48,275	42,149	43,265	42,691
Reduction rate (%)	—	12.7	10.4	11.6

Approximately 80% of Taisho Pharmaceutical's CO₂ emissions are made within Saitama Prefecture, including the Omiya and Hanyu Factories, along with the Research Center. During FY2017, efforts to improve energy efficiency at the Hanyu Factory resulted in a 1.3% reduction in CO₂ emissions compared to the previous fiscal year, but fell short of the target of a decrease of 1.4%.

Promotion of Energy Saving

Goal

Reduce groupwide average annual specific energy consumption* by 1% or more in FY2016 to FY2020

* Average annual energy consumption

(1) Omiya Factory (including Research Center): Energy consumption / (number of production lots × floor area)

Okayama Factory and Hanyu Factory: Energy consumption / (production × floor area)

(2) Sales and back offices: Energy consumption / floor area

The specific energy consumption is the weighted average of the component ratios of the respective energy consumptions in (1) and (2).

Fiscal year	2013	2014	2015	2016	2017
Energy consumption rate	100.6	99.9	100.3	96.5	106.5
Average consumption rate over 5 years	100.7				

The groupwide energy consumption rate for FY2013 to FY2017 has been collated in a chart. In FY2017, the groupwide energy consumption rate increased by 6.5% compared with the previous year. As a result, the annual average energy consumption rate increased by 0.7%.

The reason for the increase in the groupwide energy consumption rate was an 8.1% reduction compared with the previous year in total floor space used for calculating the consumption rate at the Omiya Factory due to a building removal, increasing energy consumption by 1.6%.

Main Energy-Saving Measures Taken in FY2017

Measure	
Taisho Pharmaceutical groupwide	(1) Update the cooling facilities (increase efficiency)
	(2) Introduce LED lighting, partial lights down
	(3) Implement Cool Biz
	(4) Participate in the Lights-Down Campaign hosted by the Ministry of the Environment
Production and logistics departments	(5) Review the operations of production facilities
	(6) Upgrade the freezers
	(7) Review the utility operations

Control of Fluorocarbon Emissions

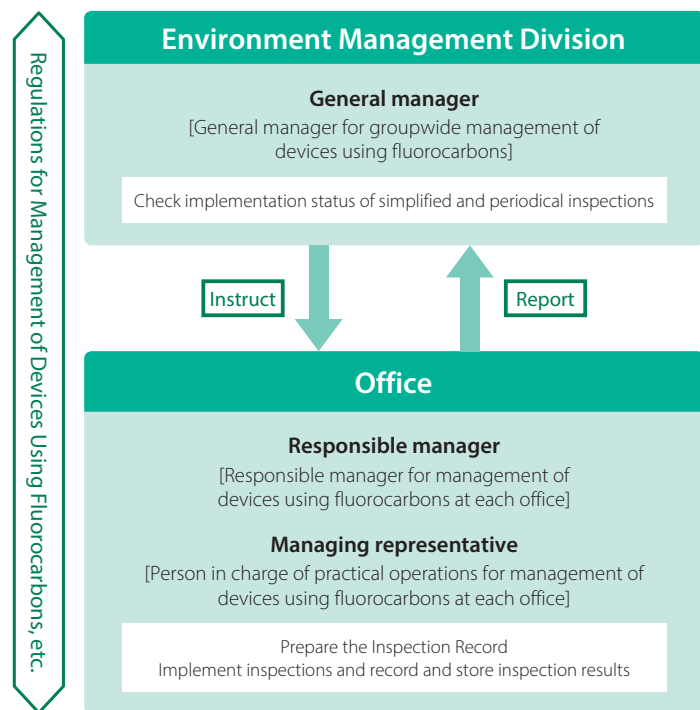
Goal

Appropriately manage devices using fluorocarbons through simple and periodical inspections of devices using fluorocarbons based on the Regulations for Management of Devices Using Fluorocarbons, etc. and reduce greenhouse gas emissions

❖ Appropriate Management of Equipment Using Fluorocarbons

To ensure compliance with the Act on Rational Use and Proper Management of Fluorocarbons, we have established a groupwide system for managing devices using fluorocarbons, etc. and have selected a general manager and assigned responsible managers and management representatives at the respective offices to form a system that allows systemized management. In addition, we have established the Regulations for Management of Devices Using Fluorocarbons, etc. and listed the devices that use fluorocarbons as coolant; planned, implemented, and recorded their checks; and understood and reported the leaked amount of fluorocarbons to appropriately manage devices using fluorocarbons.

Groupwide System for Managing Devices Using Fluorocarbons



Calculated Leaked Amount of Fluorocarbons

Leakages occurring in FY2017

[Number of occurrences] 17

[Calculated leaked amount] 474 t-CO₂

Date	Cause	Leaked amount (t-CO ₂)
2017/5/9–2018/3/20	Gas leakage from air conditioner, refrigerator or freezer equipment	78.9 (9)
2017/8/21	Gas leakage from air conditioning unit	108.6
2017/12/4	Occurrence of pinholes after contact occurs between pipes in the external component of the freezer unit	21.3
2018/2/21	Oil leakage (gas leakage) from the external component of the air conditioning unit	105.0
2018/3/22	Gas leakage detected during repairs caused by poor management of air conditioning unit temperature control	10.5
2018/3/29	Unrecovered fluorocarbon gas leakage amount reported lubricant found during air cooling chiller and coolant piping work in the second building of the Taisho Pharmaceutical head office	149.5 (4)

In the future, we will learn from the leakage cases and strive to prevent leakages.

Reduction of Environmental Loads Associated with Transport



The reduction of environmental loads associated with transport is an important issue. Accordingly, Taisho Pharmaceutical strives to implement activities such as the improvement of energy efficiency during transport and the reduction of transported materials to reduce the environmental loads during transport.

Promotion of Environmentally Friendly Logistics Operations

Goal

Reduce average annual energy consumption rate associated with transport by 1% or more

❖ Improvement of Energy Efficiency during Transport —Compliance with “Role of Consigners” in the Act on the Rational Use of Energy (Energy Saving Act)—

The annual amount we transport as a cargo owner is 30 million ton-km or more, so we fall under the “Specified Shippers” referred to in the Energy Saving Act.

We are performing activities such as the promotion of the modal shift (changing transport methods to reduce the burden on the environment), reducing the number of transport occasions, and the improvement of fuel efficiency to reduce energy consumption during transport.

The energy consumption in FY2017 decreased by 5% compared with the previous year, but the specific energy consumption (specific transport amount) increased by 0.3% compared with the previous year due to decreases in large-scale vehicles because of the introduction of fixed-temperature vehicles to transport pharmaceuticals and the reduction in volume of train transport. However, there was a 0.8% improvement in average specific energy consumption over five years.

❖ Promotion of Modal Shift

To improve energy efficiency during transport, we are promoting modal shift. Since energy consumption and ton-kilometer for each transport method has the relationship of “railway < ship < truck,” switching the transport method (e.g. from truck to ship) will help reduce transport energy.

In FY2017, railway transport decreased by 13%. As a result, the percentage that railway accounted for out of all transport fell by 0.8%, and the percentage of truck transport correspondingly increased, which caused specific energy consumption to worsen. Modal shift is an effective method to reduce CO₂ emissions, so it will be continued going forward.

Transported Quantity of Products by Transport Method

Fiscal year	2013		2014		2015		2016		2017	
	Transport amount (10,000 ton-km)	Percentage	Transport amount (10,000 ton-km)	Percentage	Transport amount (10,000 ton-km)	Percentage	Transport amount (10,000 ton-km)	Percentage	Transport amount (10,000 ton-km)	Percentage
Total transport amount	8,635	100.0	8,104	100.0	8,000	100.0	7,934	100.0	7,507	100.0
Truck	6,300	73.0	6,099	75.3	5,770	72.1	5,708	72.0	5,451	72.6
Railway	866	10.0	534	6.6	748	9.4	868	10.9	754	10.1
Ship	1,468	17.0	1,470	18.1	1,482	18.5	1,358	17.1	1,302	17.3

Energy Consumption and Specific Energy Consumption Associated with Transport

Fiscal year	2013	2014	2015	2016	2017
Energy consumption (converted to crude oil) (kL)	2,960	2,702	2,690	2,626	2,494
Energy consumption rate (kL/10,000 ton-km)	0.343	0.333	0.336	0.331	0.332
Compared with the previous year (each fiscal year) (%)	-2.6	-2.9	+0.9	-1.5	+0.3
Compared with the previous year (average for five years) (%)	-0.8				

❖ Reduction of the Number of Transports

We have reduced the number of transports by increasing the load quantity per truck to improve the efficiency of transportation energy.

In FY2017, we focused on increasing truck sizes (e.g. using larger trucks, such as replacing a 10-ton truck with a 20-ton truck) and utilizing stacking materials as activities for improving transport efficiency.

❖ Improvement of Fuel Consumption

By improving the fuel consumption of freight trucks, we are promoting the reduction of energy consumption.

In FY2017, after consultations with carriers about the truck transport for branch office supply, we improved the fuel consumption of trucks by using low-fuel-consumption trucks and by ceasing idling during stops in winter (for air conditioning for the driver) by using an electronic blanket, a regenerative air conditioner, etc.

Establishment of a Sustainable Recycling Society and Reducing Waste



In a recycling society, the establishment of 3R strategies is required. Taisho Pharmaceutical is striving to reduce the landfill disposal volume by controlling the waste amount and promoting the appropriate use of recycled products.

Reducing Waste and Appropriate Management of Waste Handling

Goal

Continue the status check of waste handling and the self-check of waste management at each office based on the Industrial Waste Management and Waste Management Regulations to operate waste disposal appropriately

Waste Materials and Recycling

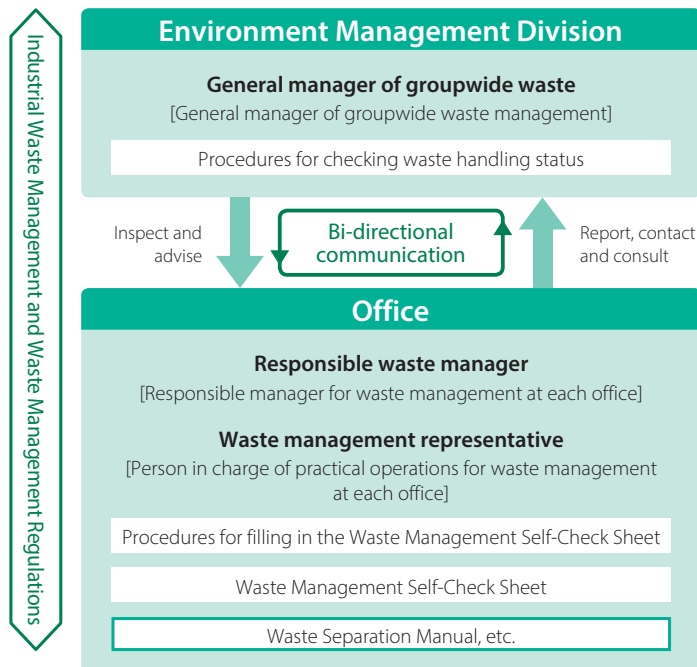
The recycling rate in FY2017 was 99.8% due to reductions in container and packaging volume and weight to cut down on the amount of waste materials generated and striving to recycle by entrusting it to a recycling company.

Fiscal year	2013	2014	2015	2016	2017
Waste generated (Tons)	6,208	5,378	6,277	5,743	5,428
Recycling rate (%)	99.7	99.7	99.8	99.8	99.8

Establishment of Rules regarding Waste Disposal

To be sure to comply with the Waste Management and Public Cleansing Act, we have established a groupwide system for managing waste and have selected a general manager of groupwide waste and assigned responsible waste managers and waste management representatives at the respective offices (15 offices) to create a system that allows systemized waste management. In addition, we have established the Industrial Waste Management and Waste Management Regulations and related procedures to manage waste appropriately.

Groupwide System for Managing Waste (Conceptual Diagram)



Water Management

Effective Use of Water Resources

Water is an important resource for the production of high-quality pharmaceuticals. To ensure it has the water resources it needs, the Taisho Pharmaceutical Group is striving to conserve water by managing the quality of wastewater generated by its factories and Research Center, by reusing water, and so forth.

Water use in FY2017 was 769,000 m³, a decrease of 7.3% compared with the previous fiscal year, and the rate of internal recycling of water such as in coolants was 2.6%.

Fiscal year	2013	2014	2015	2016	2017
Water use (10,000 m ³)	88.5	82.5	84.0	83.0	76.9

Response to Water Risk

Taisho Pharmaceutical conducts water resource risk assessments at production bases and ascertains the impact its business activities will have on water resources in the future and works to reduce the impact. The World Resources Institute's Aqueduct Water Risk Atlas and the Ministry of the Environment's National Ground Environment Information Directory are among the tools used for the risk assessment.

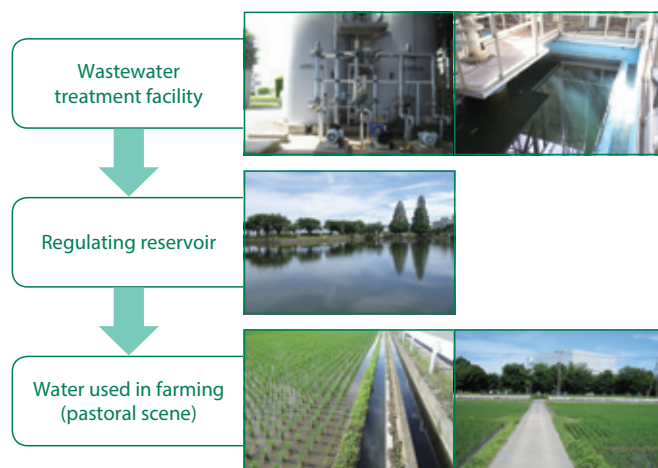
At this point in time, there are no bases that have the latent risk in the near future of operations being forced to halt for reasons such as drought, water shortage or worsening water quality, or subsidence caused by drawing groundwater.

We will continue to strive for effective use of water resources.

Using Recycled Water

The Hanyu Factory is located about 60 kilometers north of Tokyo in a pastoral area of the northern Saitama Prefecture city of Hanyu, separated from Gunma Prefecture by the Tone River. Wastewater from the factory is biologically treated in a wastewater treatment facility, undergoes coagulation, and is filtered. After organic materials have been removed, the water is sent to a regulating reservoir owned by the city where it is fed into rivers and used for farming. Some of the water is retrieved and processed, after which it is used as production equipment coolants or to water plants. This recycled water is an important water resource.

At a time of usable-water shortages due to global warming or fears over the impact on ecosystems that new water resource developments may cause, being able to utilize recycled water as an alternative water source contributes to a sustainable recycling society.



Environmental Friendliness of Goods Used and Products



We are striving to select and purchase environmentally friendly goods and design environmentally friendly products. In addition, we handle containers and packaging when they are finally disposed of in accordance with the relevant laws and regulations.

Purchasing Environmentally Friendly Goods (Green Purchasing)

❖ Internet Purchasing System

In FY2005, we introduced an Internet purchasing system for consumables. The purchase catalog preferentially contains environmentally friendly products, which leads to green purchasing.

❖ Green Purchasing of Automobiles

Taisho Pharmaceutical and Taisho Toyama Pharmaceutical Co., Ltd. use 994 cars for their business activities (as of the end of March 2018). We have progressively switched them to low-emission cars, and in FY2011, all the cars used for business activities achieved a reduction of 75% or more in exhaust gas compared with the certification standard in 2005.

Since FY2008, we have introduced some hybrid cars, and since FY2013, we have altered the main car from the TIIDA LATIO (1,500 cc) to the LATIO (1,200 cc) with lower displacement to improve fuel consumption. In the future, we will further reduce the environmental loads by conducting eco-driving, etc.

Percentage of Green Purchasing of Corporate Cars

(As of the end of March 2018)

	Number of cars	Percentage
Total number of cars	994	
Exhaust gas certification standard in 2005	994	
Reduced by 75% (New ☆☆☆☆) Hybrid	29	100%
Reduced by 75% (New ☆☆☆☆)	965	
Reduced by 50% (New ☆☆☆)	0	
Others	0	0%

Environmental Friendliness of Products

❖ Designing Environmentally Friendly Products

Containers and packaging after a product is used generate environmental loads when they become waste. To reduce them, we are considering designing the products with lower environmental loads.

❖ Compliance with the Containers and Packaging Recycling Act

We fulfill our duties as a business operator by outsourcing product reconfiguration to the Japan Containers and Packaging Recycling Association.

The outsourcing cost for product reconfiguration in FY2017 was a total of 124 million yen in glass bottles, paper containers and packaging, plastic containers and packaging, and PET bottles.

The outsourcing cost for the product reconfiguration for each material is also found on the website of the Japan Containers and Packaging Recycling Association.

Outsourcing Costs for Product Reconfiguration in FY2017

Container type	Glass bottles
	Paper containers and packaging
	Plastic containers and packaging
	PET bottles
Outsourcing cost (after clearing)	124 million yen

Environmental Risk Management and Pollution Prevention

We have established a groupwide framework for managing environmental risks. In addition, we have set unique management standards for preventing environmental pollution such as air pollution and water contamination and are conducting activities for them.

Reduction of Environmental Risks

❖ Establishment of Organization that Deals with Environmental Risks

Since FY2008, we have prepared an appropriate framework and procedures for an emergency event related to the environment and have established the following guidelines to build a groupwide crisis management framework.

- Guidelines for Environmental Pollution Special Crisis Response
- Chronological Action Plan for Environmental Pollution Special Crisis

The Production Department uses the ISO 14001 system to establish a framework against environmental risks.

❖ Implementation of Emergency Event Response Training

We provided emergency event response training, which assumes an explosion or fire caused by a chemical leakage or ignition, to teach the response methods, extract problems, and improve the measures against them.

The Production Department also provides training every year that assumes that an emergency event occurs in a dark place where fewer workers are present, such as at nighttime and on days off.

Operational Status of ISO 14001

❖ Status of Audit

Taisho Pharmaceutical integrated the environmental management systems certified for each factory into the Production Department and commenced its operation in FY2010. In the periodic audit performed in FY2017, one item for observation was found.

In addition, in the internal environmental audit, we conduct not a simple system audit but a performance audit, which audits the system in terms of performance, and an environmental risk audit. We also strive to improve the auditors.

❖ Implementation Status of ISO 14001 Audit

Office	Certificate integrated date	Audit date	Findings	
			Minor nonconformance	Item for observation
Production Department	January 2011	November 2017	0	1

Efforts for Pollution Prevention

❖ Air Pollution and Water Contamination Prevention

We not only comply with laws and regulations but also set our own management standards as required to reduce the environmental loads.

❖ Soil and Groundwater Pollution Countermeasures

As for soil and groundwater pollution, which was found during the factory site soil investigation that was conducted during the period from November 1999 to May 2000 at the Omiya Factory, we have undertaken continuous cleaning since FY2001.

* The environmental data can be found on our website.

❖ Appropriate Management of PCB Waste

We have appropriately stored and managed PCB waste according to the Waste Management and Public Cleansing Act and the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes. We check the storage and management status on a periodic basis and report the results to the government body every year.

Looking ahead, we are planning to dispose two low-pressure capacitors containing PCBs through the Japan Environmental Storage & Safety Corporation (JESCO) during FY2018. The remaining fluorescent lighting ballasts containing PCBs will be stored and managed in accordance with instructions from the government and associated organizations.



❖ Management of Chemical Substances

As for the PRTR-applicable chemicals specified in the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof as well as environmentally toxic chemicals, we strive to manage them appropriately and reduce their emissions according to the related rules and Taisho Pharmaceutical's unique management procedures.

Environmental Communication

We are striving for environmental communication internally and externally through group education regarding the environment, bi-directional external communication, and information disclosure via our website, etc.

Bi-Directional External Communication —Active Discussions with the Government, Local Residents, and Pharmaceutical Associations, etc.—

We are striving for bi-directional communication through information disclosure regarding the environment and interactions with local communities.

During FY2017, we participated in the Clean Up Ina Town Activities and exhibited with a booth at the Saitama City Environment Forum.



Clean Up Ina Town Activities on May 28, 2017



Saitama City Environment Forum on October 6 and 7, 2017

❖ Implementation Status of Environmental Communication

We are promoting environmental activities in cooperation with the environment-related committees of the pharmaceutical associations and the material recycling associations.

Activities implemented	Detailed activity
Taking part in the Saitama City Environment Forum	Disclosed information about our environmental activities to deepen bi-directional understanding
Eco exhibition	Installed in the corridor for visitors at the Omiya Factory (manufacturing laboratory building 2)
Participated in industrial associations	Participated in the operation of the environment-related committees hosted by the Japan Pharmaceutical Manufacturers Association and the Japan Self-Medication Industry to promote environmental activities in cooperation with them
Participated in recycling associations	Participated in the Glass Bottle 3R Promotion Association to promote recycling

Organizations We Are Associated with

- Environment & Safety Committee of the Japan Pharmaceutical Manufacturers Association
- Environment Committee of the Japan Self-Medication Industry
- Japan Containers and Packaging Recycling Association
- Glass Bottle 3R Promotion Association
- Saitama City Environment Conservation Liaison Council

Preserving Biodiversity

❖ Initiatives for Biodiversity in Local Communities

We are involved in activities to preserve biodiversity held during the summer for local residents and guests at an affiliated hotel in Shimoda on the Izu Peninsula. The contents of the activities were a guide to collecting insects and a lesson.

Learning about the insects endemic to the southern Izu region, whose geographic conditions include receiving a strong influence from the Kuroshio Current, entails learning about how the region came about and its systems, along with the important role that biodiversity plays in living. The lesson contents started with geology, showing how the Izu Peninsula, a volcanic group, was formed by colliding with Honshu in the comparatively recent past and how this related to insects developing special characteristics. The lesson moved on to land formation and how the geographical condition of a strong influence by the Kuroshio Current led to the distribution of insects with special characteristics. From there it was on to modern history, describing how foreign researchers had stayed in Japan at the port of Shimoda at the time it was opened (around 1854) and built up a record of studying Japanese insects, and explaining that these studies continue to this day to have an impact on the research of Japanese insects. All aspects taught in the lesson have a deep relationship with biodiversity on the Izu Peninsula and form a basis for understanding biodiversity throughout Japan. Community residents and guests who took part in the event rated it highly, and the local newspaper covered it.



Guide to collecting the insects endemic to southern Izu



A lesson using insects to teach about biodiversity

Environmental Education and Internal Communication Activities

—Providing Awareness of Environmental Friendliness and the Reduction of Excessive Workload, Waste, and Unevenness—

❖ Group Training

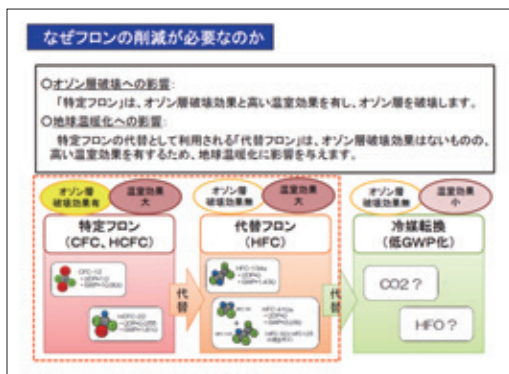
The Production Department provides environmental training to all workers at each factory according to the ISO 14001 system.

In a situation where a large number of cases of the illegal disposal of novelty goods are reported these days, the sales and back-office departments explain the risks regarding the disposal of novelty goods and compliance with the Waste Management and Public Cleansing Act at the sales meetings to improve the medical device sales representatives' awareness of compliance with laws.

We have also been continuously providing environmental training at the head office and branch offices. During FY2017, training on the environment was held in June at the Shikoku Office in Marugame City and Chushikoku Branch in Hiroshima City, in October at the Sapporo Office and in February 2018 at the Kitanihon Branch in Sendai City. During FY2017, training was held on the necessity of reducing fluorocarbons and the response to doing so with the objective of maintaining regulatory compliance. Training on the environment will continue going forward while striving to raise employees' awareness of the environment and legal compliance.



A lecture on managing devices using fluorocarbons



❖ Environment Month

We set February as Environment Month from FY2002 and July from FY2009, and performed various activities related to the environment.

In Environment Month in winter (February) in FY2017, we carried out the "Are You Eco People?" campaign by using the intranet as a groupwide

initiative in the same manner as in the previous year. We prepared questions that were the equivalent of this test and had the employees answer them.

As a result of the analysis of the answers from the participants, the knowledge about the environment among our group employees was almost the same as that of the examinees of the Eco Test.

In Environment Month in summer (July), the Production Department performed an initiative that required the workers at each workplace to consider and perform their unique environmental activities to improve their independence regarding environmental activities.

One example is an environmental campaign at a workplace where employees unified to improve their environmental awareness through internal and home activities that encourage environmental activities and eco commuting and through cleaning activities around factories, etc.

* "Eco People" is the name for the people who have passed the Certification Test for Environmental Specialists (Eco Test). The Eco Test was created to develop people who think about society and the environment or promoting a sustainable society, and is conducted twice a year by the Tokyo Chamber of Commerce and Industry.

❖ Initiatives Uniquely Conducted by Each Department in FY2017 (July 1, 2017 to August 31, 2017)

[Production Department] Participants: 921 people (including the workers' families)



Cleaning activities around factories

施策	削減効果 (CO2削減量)	削減効果 (コスト削減)
1. 電気ボート清掃機1台1日にプラグを抜く	2,507円	69.8kg
2. 冷蔵庫にもプラグを抜く	1,622円	28.5kg
1. パスルーユニット	1,283円	28.2kg
2. 電気キタライフックへの活用	4,503円	6.3kg
1. 比付機	643円	18.5kg

全部実践すると、1年間で... 10,078円 151.3kg

Making an original poster



Living an environmentally conscious lifestyle

Environment Month Initiatives Conducted in FY2017

- Environment quiz
- Week of car-free commuting (twice a year)
- Lights-Down Campaign (on the day of the summer solstice and on Cool Earth Day)
- "Are You Eco People?" campaign
- Unique environmental activities at each workplace